STILL ONLY £2.99

AMIGA COMPUTING

Issue 50 • July 1992 • £2.99

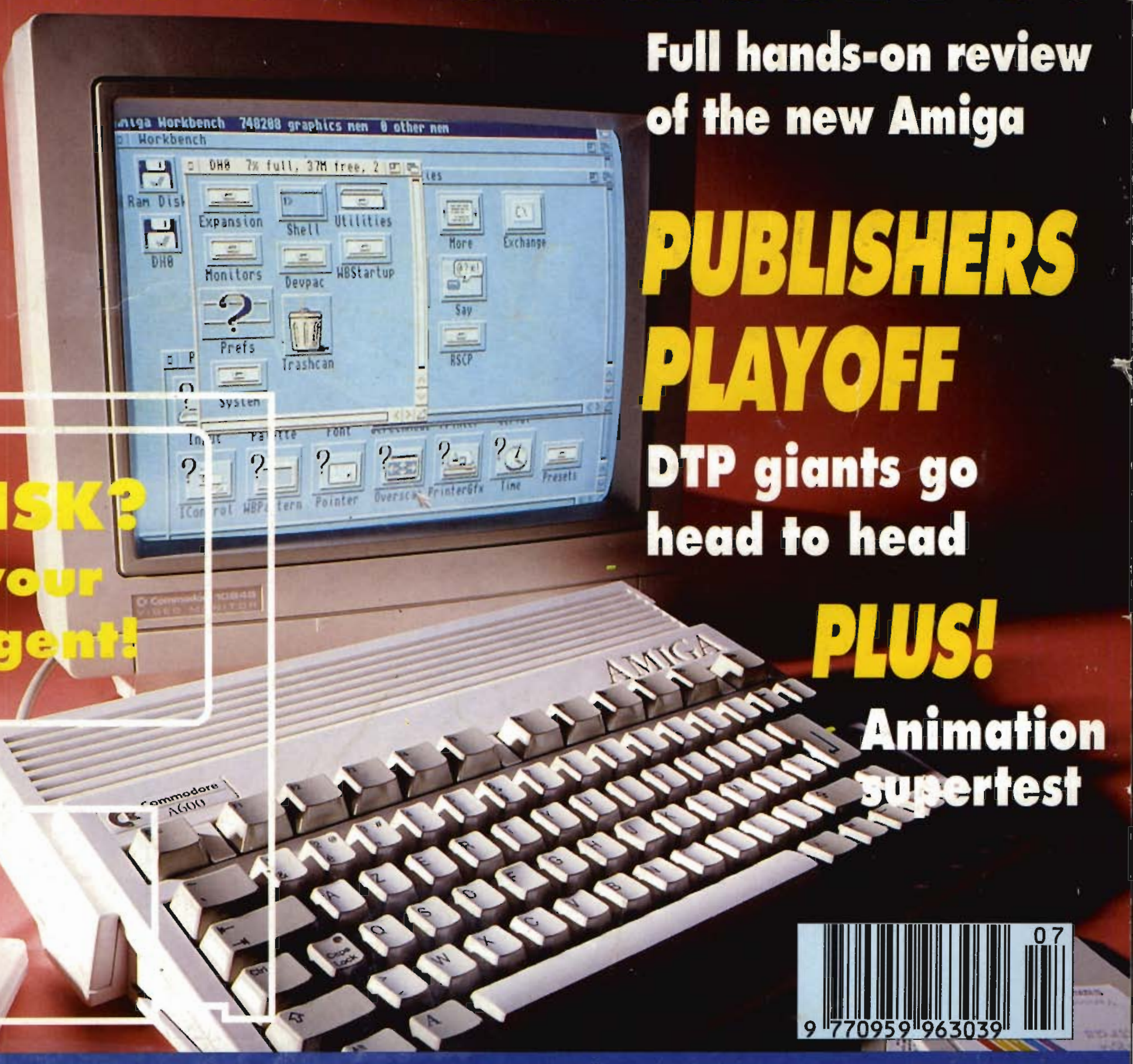
INSIDE GAMER



Gremlin's Space Crusader gets the once over

INSIDE: Imagine 2.0 and Real 3D • Terraforma • Makepath • VLab

A600 exclusive!



Full hands-on review of the new Amiga

SAVE £100!

on the retail price of Saxon Publisher 1.2

PUBLISHERS PLAYOFF

DTP giants go head to head

NO DISK? Ask your newsagent!

PLUS!

Animation supertest

Amos • DTP • Comms • Music • DTV

europress PUBLICATIONS

AMIGA COMPUTING

July 1992

WHO'S WHO

EDITOR	Stevie Kennedy
ASSOCIATE EDITOR	Paul Austin
ART EDITORS	Tym Leckey Terry Thiele Mike Hardman
NEWS EDITOR	John Butters
PRODUCTION EDITOR	Phil Morse
GAMER EDITOR	Daniel Whitehead
STAFF WRITERS	Jonathan Maddock Darren Evans
AD MANAGER	Jane Conway
SENIOR AD SALES	Sue Horsefield
AD SALES	John Derbyshire Simon Lees
AD PRODUCTION	Barbara Newell
CUSTOMER SERVICE	Sandra Childs Linda Thomas Sirje Green Brigit Ruddik Robert Matthews
PRODUCTION	Sue Cantrill
SYSTEMS MANAGER	David Stewart
CIRCULATION DIRECTOR	David Wren
MARKETING MANAGER	Lizanne Barber
DISTRIBUTION	COMAG (0895) 444055
SUBSCRIPTIONS	051-357 2961

Member of the Audit Bureau of Circulations

ABC 60,177

July-Dec 1991

Published by Europress Publications Ltd.
Europa House, Adlington Park, Macclesfield SK10 4NP
Tel: 0625 878888 Fax: 0625 879966

PUBLISHER	Richard Williams
CHAIRMAN	Derek Meakin
FINANCE CONTROLLER	Ian Bloomfield

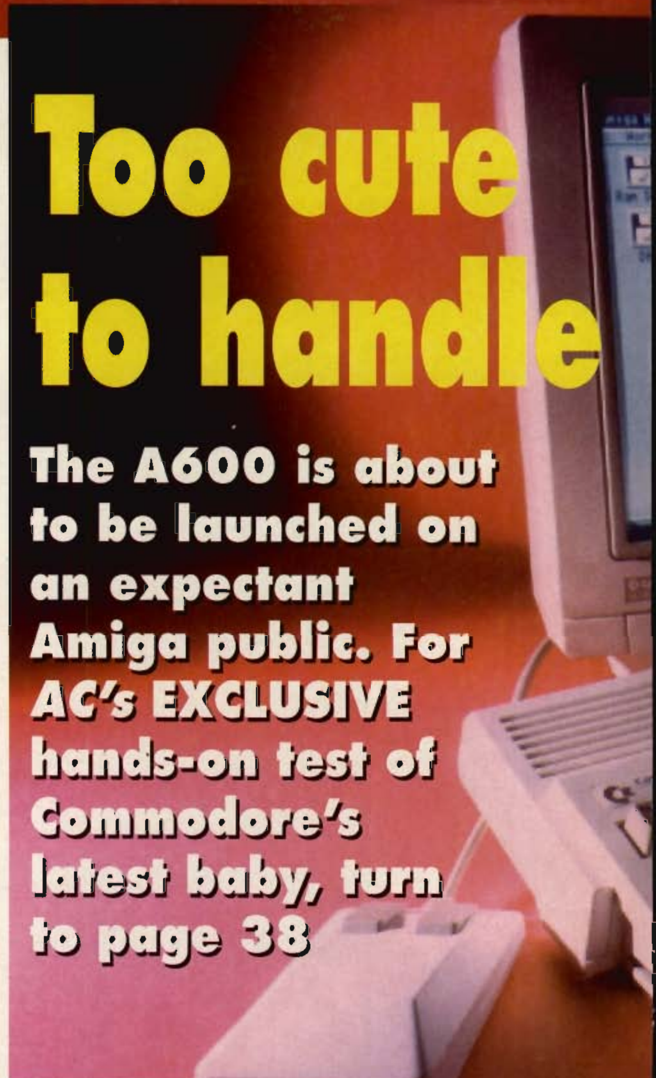
europress PUBLICATIONS

For four years *Amiga Computing* has been the leading magazine for Amiga enthusiasts. As a key member of the Europress magazine group, *Amiga Computing* promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available.

Amiga Computing • Atari ST User • PC Today Shareware Shopper • The Micro User • GB Action Amiga Action • ST Action • Zzap! 64 Sega Force • Computer Trade Weekly

Printed by BPCC Ltd, Carlisle, Cumbria

REGULARS

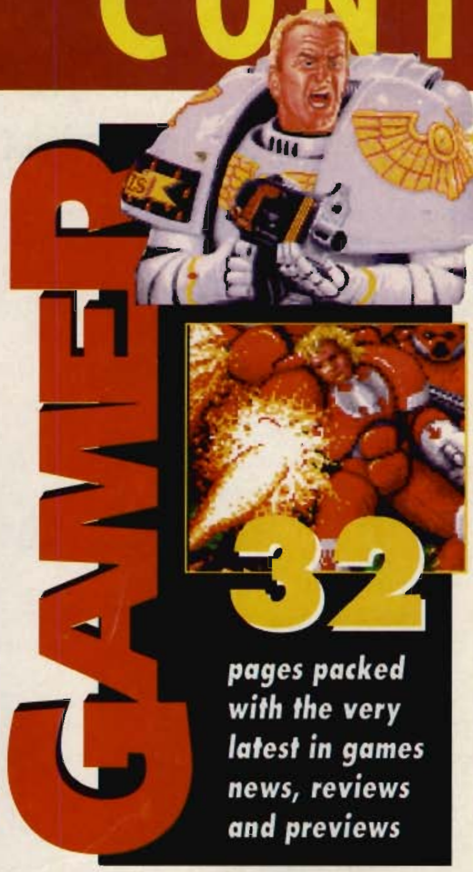


Too cute to handle

The A600 is about to be launched on an expectant Amiga public. For AC's EXCLUSIVE hands-on test of Commodore's latest baby, turn to page 38

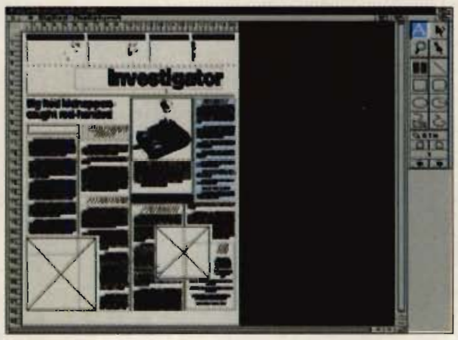
amiga almanac

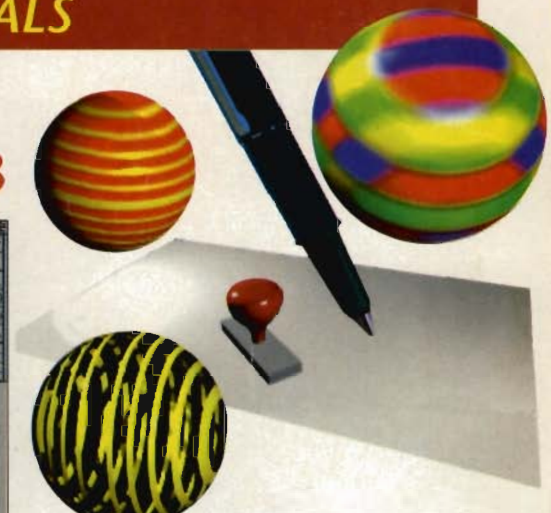
CONTENTS



Don't miss our fantastic offers for subscribers see page 138 now!

SPECIALS











THE COVERDISK

Saxon Publisher 1.2



A full demo of the latest Amiga DTP package, Saxon Publisher 1.2 – plus save £100 on the price of the full package.

Join in the high-level DTP field by taking advantage of Amiga Computing *and Surface UK's unique offer!*

You deserve the best!

Now you can get the best... with PEN PAL!

A superb package, with immense power, to fulfil all your word processing requirements and... it includes a Database! It's all so easy to use, you probably won't need to refer to the extensive 250 page manual too often.

Whilst working, you can open up to four documents simultaneously (memory permitting), search and replace; cut, copy and paste; check your spelling with a 100,000+ word dictionary. You can import your favourite IFF/HAM graphics, from programs such as DPaint II or Clip Art files in various sizes and colours. You can automatically flow text around graphics in any Workbench compatible font (there are over 200 available styles), in different sizes and colours to suit your design... even as you type. All this from a word processor and... Much, Much, More!

As you can see, this is not just any ordinary word processor! Full Page View with position, edit and creation of graphic objects. Mail Merge using the built in database and forms designer. Creation of templates for complex reports, into which the database can be merged.

Operating with 32 fields per record, and 32,000 records per database with a fast sort of 1000 records in less than 5 seconds this is a *real* database.

Pen Pal requires an Amiga 500/1500/2000 or 3000 with a minimum of 1megabyte of available memory.



Pen Pal

When...you deserve the best!

£79.95

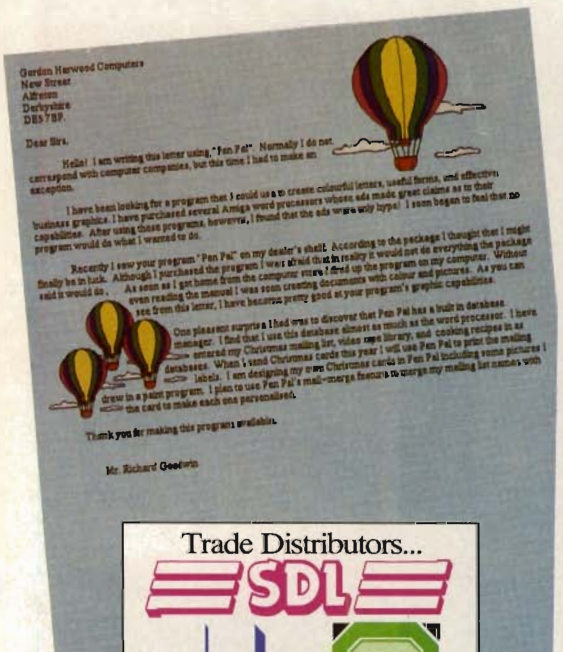
"...I am extremely pleased with your product especially the Graphic Capabilities within the Word Processor. Having the Database on the same disk has made PEN PAL the best program I have..." *D.S.B., Plumstead, LONDON*

"...Please let me tell you how amazed I am at how EASY IT IS TO USE PEN PAL. The manuals supplied are very informative and very clear..." *P.S.S., Clifton, NOTTINGHAM*

"...A most excellent piece of software..." *E.P.H., Strathclyde, SCOTLAND*

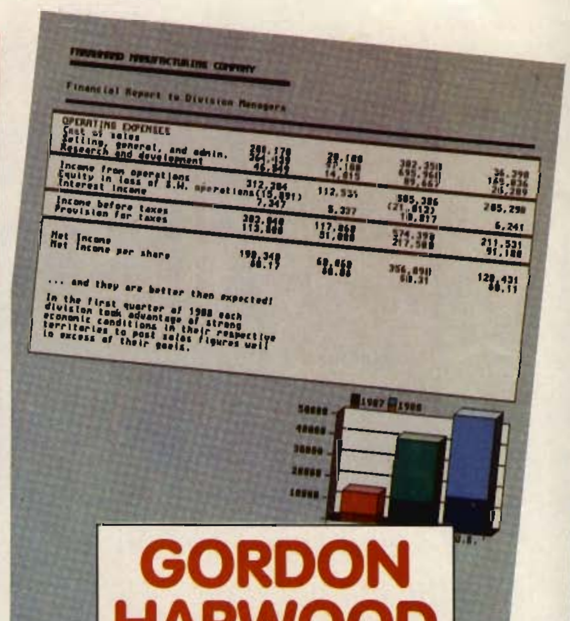
."...its handling of graphics is unsurpassed: Pen Pal is the only program I tested that will automatically wrap text around graphics..." *Amiga World...Jul. '90*

."..without beating around the bush Pen Pal is very special.." - "There is little to fault Pen Pal and it deserves to do well." *Amiga Format...Dec. '90*



Man's (and Woman's) Best Friend





Trade Distributors...

SDL

Precision Software

CENTRESOFT

HBM HB MARKETING

Pen Pal Order Line

0773 836781

Pen Pal is also available from good computer stores everywhere!

Pen Pal is supplied into the UK through...

Gordon Harwood Computers New Street Alfreton Derbyshire DE5 7BP

Telephone: 0773 836781 Facsimile: 0773 831040

GORDON HARWOOD HARWOOD HARWOOD Computers

AMIGA COMPUTING NEWSLINE AMIGA COMPUTING

Commodore axe A500

EXCLUSIVE

by John Butters

PRODUCTION of Britain's best-selling 16-bit home computer, the A500, has ended, and last models have already been sold to the trade.

Commodore confirmed to *Amiga Computing* that A500 production has stopped at the giant's main manufacturing plant. The neater A600 will be the replacement entry-level machine.

"We are switching emphasis on to the A600 for some very good reasons – probably for the right reasons," commented Commodore's Andrew Ball.

"But the A500 will be supported in some shape or form and the A570 drive will be released for the computer soon."

Don Carter from trade distributor ZCL said: "The A500P is now effectively a discontinued product, although there will be pockets of stock at retail level for the next few weeks.

"Our Calculus Stores will be focusing very strongly on the A600 with the new technology and an astonishing range of peripherals that I am regrettably not allowed to comment on.

"Everything Commodore produce from now on will be downwardly compatible with the A600's SMT [surface mount technology and none of it will work on the A500."

Carter concluded: "The A500P now looks very much yesterday's product."

A2200 planned for autumn launch

THE machine once rumoured to be in the pipeline and code-named the Amiga Classic will be launched later this year as the A2200, *Amiga Computing* can exclusively reveal.

On information received from sources close to Commodore, we can reveal that the machine, which will be available in two models, is based on the 68020 processor and utilises A600-style technology.

The desktop model will appear in a slimmer-than-A3000 casing with built in Commodore A2091 40Mb hard drive. A second super slimline model will use the same internal IDE hard drive as the A600-HD, but will have a separate keyboard and a monitor will be supplied as part of the package.

Super slimline A2200s are unlikely to be very expandable, though both models will feature 2Mb chip RAM.

Desktop A2200 models will also be based on the A600 motherboard, which means that there will be an internal IDE interface as well as the A2091, but this is expected not to be used by Commodore on this model.

As with the A600, surface mount technology and on-site warranties will be the order of the day. When asked to comment on the new Amigas, Commodore's Andrew Ball would neither confirm nor deny the story, stating only that "the Amiga will continue to improve".

He also refused to speculate on a possible launch date for the machine, though we think it unlikely to be any later than autumn this year. It is too early to say what price the new Amiga will sell at, and though the slimline model with monitor and internal IDE hard drive could sneak in under the £1,000 mark, the desktop model with A2091 40Mb drive is unlikely to be cheap.



The A600, on which the forthcoming A2200 is based

The 6th International Computer Show
Incorporating the 16 Bit Computer Show

Shows shapes up

THERE'S something promised for every Amiga user at the forthcoming 6th International Computer Show, sponsored for the first time by Europress Publications.

More than 180 firms will pack into the show halls and many have promised to unveil new Amiga software and hardware for the first time.

But unlike many computer shows it won't be just a shopping event. *Amiga Computing* and its sister magazines have pulled all the stops out to ensure every visitor is entertained.

Experts

An advice centre will offer free five-minute sessions on buying a new computer, software or upgrades and a clinic manned by Amiga experts will give sound advice on your problems.

And for the less serious visitors there will be a special Gamer Challenge. They can compete against another driver in Gremlin's top racing game Lotus Turbo Challenge 2.

Fifty copies of the game are being given away to high scorers and the top driver at the end of the three day event will be sent a fantastic package of games worth over £500 – courtesy of the best games section in your favourite Amiga magazine.

All this and more will be happening at the Wembley Exhibition Centre, London from July 10 to 12.

New GVP graphics card

IN A move seemingly aimed at Progressive Peripherals' Rembrandt graphics board, GVP have announced their own high-end graphics card in the shape of the Enhanced Graphics System EGS110/24.

Designed as a high-speed graphics display and rendering card, the 24-bit system utilises its own hardware to enable line redraws at up to three million pixels per second and blockwrites at up to 576Mb per second.

To allow such high speed transfers, the board is equipped with 25ns VRAM which can be accessed across the 32-bit address bus used on GVP's combo accelerators.

Software is supplied in the form of a number of library modules similar to the Sage standard libraries, and a Workbench driver which enables many programs, among them PageStream, to run directly on the board with no further software.

Depending on the quality of monitor used, GVP claim a screen resolution of up to 1,600 x 1,280 and 80Hz scan rates, giving an ultra smooth display in 24-bit colour. Applications running in 256 colours will have access to a 3,200 x 2,560 screen size, though these will have to be specially written for the board.

There is no UK release date as yet, but suggested US prices are $2,699 for the 4Mb VRAM option, and $3,399 for the 8Mb version. Contact Silica Systems on 081-309 1111 for more details.



The G-Force range is now available for A1500/2000 owners

G-Force 040 branches out

GREAT Valley Products (GVP) have just announced that their hitherto A3000-only G-Force 68040 accelerator will soon be released in an A2000 combo configuration.

The card will be available in 25MHz and super-fast 33MHz models, and both will be supplied with 4Mb RAM expandable to 16Mb. In addition, a SCSI hard drive controller will be built in to the board for fast data transfer and DMA access to the on-board RAM.

In a new departure for GVP, there will also be serial and parallel ports mounted on the card and accessible through the Zorro through slot at the rear of the A1500/2000. With the addition of these ports, the G-Force 040 combo becomes the first GVP Single Board Computer (SBC).

For details of UK price and availability, contact Silica Systems on 081-309 1111.

A570 launch delayed

THE long-awaited Commodore CD-ROM drive still has no official launch date. Despite earlier hopes that it would be available by the end of May, Commodore now expect the A570 to be released no earlier than "around about June".

When asked the reason for the latest delay, a Commodore spokesperson said: "This is a very important product for us and CD-ROM entertainment systems in general, so we want to make sure it is absolutely right first time."

A570s on show at the European Computer Trade Show in April were running a variety of educational software, but had no DMA through port. Commodore still cannot confirm whether or not the unit will have such a feature when launched.

Midi makes it big

WESTMINSTER Exhibitions have confirmed that attendance at the recent Midi Music Show, held at the Novotel Hammersmith between 24-26 April, was up by 50 per cent on last year's total.

In all, more than 12,000 musicians and computer music buffs crowded the hall to see the 120 exhibitors, over 70 per cent of whom, according to Westminster's Tim Collins, have already re-booked for next year. He is, he claims, "over the moon".

New Amigas, new chips, say Commodore US

IN response to criticism in the press and on bulletin boards that they are not as committed to the Amiga as they should be, Commodore's central office in the US have given unprecedented hints at their future plans for the range.

Bill Sydnes, Vice President (Engineering) recently went on record to shore up the confidence of developers and journalists in the Amiga's future. He said that "the majority of Commodore revenue comes from the Amiga and most of our research and development is devoted to enhancing the Amiga range."

On the subject of future new machines (see our A2200 story), Mr Sydnes said: "We have plans to release a number of new Amigas later this year." He also emphasised the intense R+D work which is going on into the CDTV/CD-ROM side of the Amiga.

His most interesting comments, however, relate to the possibility of an entirely new chip set appearing soon. Commodore, he claims, are "continuing the R+D effort to improve the Amiga chip set" and are considering the possibility of bringing new technology to the Amiga in an effort to boost research and development in third-party manufacturers. This, as he later stated, would mean Commodore establishing new standards, presumably for graphics, sound, and so on, a move which could mean the implementation of the prototype "AA" chip set.

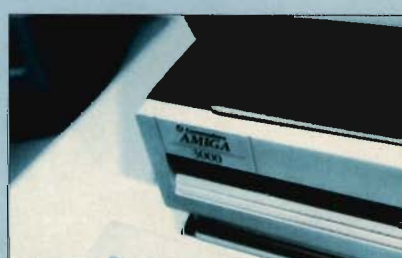
This advanced chip set (pronounced "double-A") – shown to developers at last year's Milan developers' conference – supports, among other things, 256,000 colour HAM from a 24-bit palette in any resolution up to Super hi-res (1,280 x 1,024) and dual playfields in any resolution,

It also supports a "4x" 32-bit system offering four times the normal data transfer rate to and from the screen, lo-res scrolling in increments of a quarter of a pixel, vastly improved sprites, and the mixing of video modes, allowing hi-res 32-pixel-wide sprites on a lo-res screen.

Sources close to Commodore hinted that the AA chip set might make its debut in the A2200 later this year, and that all new technology should be downwardly compatible with the existing Amiga chip set. Watch this space.

Power Up saves you £1,000

OWNERS of A1500/2000 machines will soon be enjoying Commodore's new marketing thrust to boost sales of the A3000. In a "Power Up" deal similar to that offered to A500 upgraders two years ago, the Calculus chain of dealers will cut between £800 and £1,000 from the price of an A3000 when your old A1500/A2000 is part-exchanged.



Trade in deals can at last make the A3000 affordable

The resulting price of an A3000/25 system will still be a painful £2,199 (excl VAT), but the move is hoped to bring the luxury Amiga closer to many medium level serious users.

All A3000s included in the Power Up scheme will feature an extra 4Mb fast RAM, Scala, DPaint4, and AmigaVision multimedia authoring system.

Contact Calculus on 0543 251275 for your local dealer.

New products from First Choice

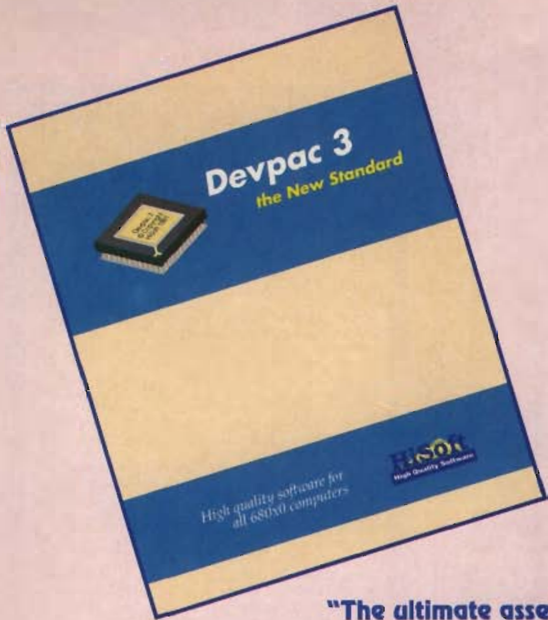
FIRST Choice Computers of Leeds have released a range of new British made products for the Amiga. Included in the complete range are a keyboard-switchable ROM sharer, a stereo sampler, drive booster to power extra floppies, and Midi interface.

The ROM switcher is the first not to require a hardware switch, so users won't have to drill holes in their A500 casing, and there is also a Scart/VCR switch box for those who want to use their monitor as a TV in conjunction with a domestic video player.

Prices of the new Phoenix peripherals range from £16.99 to £49.99 and First Choice can be contacted on 0532 311932.

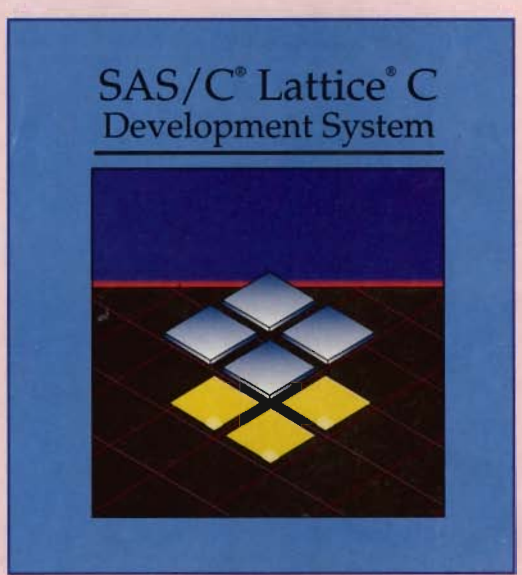
Some reasons to be cheerful

HiSoft is renowned for its range of language systems, utilities and entertainment programs on the Amiga. We have been writing for the Commodore 680x0 computers since they were first introduced into the UK and thus we know both the hardware and software intimately. Our company policy is always to offer the highest quality software at an affordable price with a complete range of backup support options - in these uncertain, difficult times, we'd like to put a smile on your face.

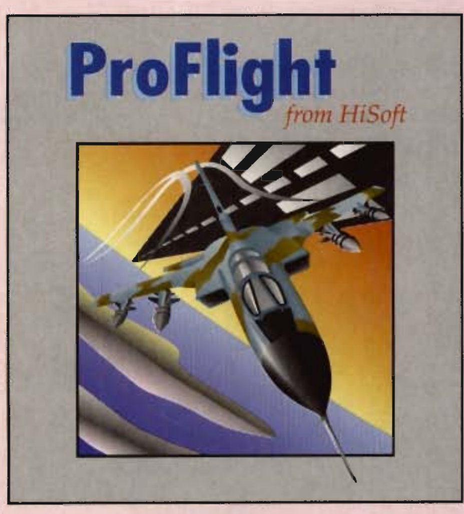


"The ultimate assembler language system"

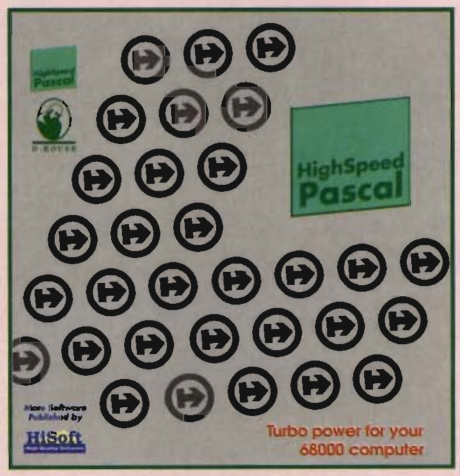
Amiga Format Gold 4/92



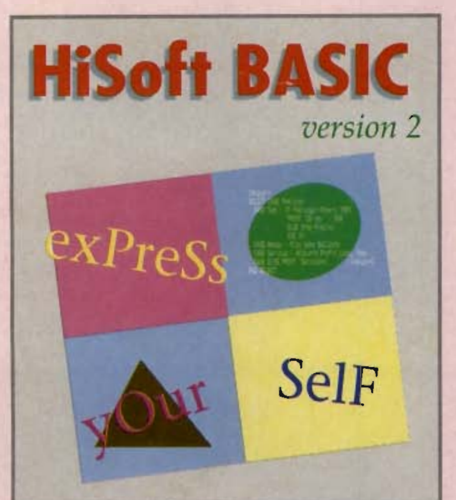
The professional C development package
includes free Silver Support service



The most accurate flight sim yet ...



The new Pascal compiler with Turbo Pascal® compatibility



Coming soon to an Amiga near you!

Stop Press

We are delighted to announce that, following an exclusive agreement with Kuma Computers Ltd, we have taken over the distribution, support and development of their popular Amiga products. Existing Kuma customers should write to us or call us for details of our support schemes and information on our plans for the future of Kuma software.

At the moment we have the popular K-Spread 4 spreadsheet and K-Data database available (see our order form on the right).

We also have stock of all the 3rd Edition Amiga ROM Kernel manuals from Addison Wesley, together with the excellent 3rd Edition of The AmigaDOS Manual (Bantam Press).

HiSoft
High Quality Software

for more information on any of our products, please call HiSoft on 0525 718181, or fax us on 0525 713716 or write to us at: The Old School, Greenfield, Bedford MK45 5DE UK.

Free gifts!

(subject to availability)

HiSoft Software is available from all good computer shops. If you should have difficulty in obtaining any HiSoft product, you can order directly from HiSoft using this order form. You can pay by post/fax/telephone using Mastercard/Access/Visa/Switch/Connect etc. or simply send us a cheque/PO. Some free gifts are available for direct purchasers. Prices include P&P and VAT within the UK.

SAS/Lattice C 5.10b inc SS	£229.00	☐
HighSpeed Pascal	£99.95	☐
HiSoft Devpac 3	£69.95	☐
Power BASIC	£39.95	☐
HiSoft BASIC 1.05 inc Extend	£59.95	☐
ProFlight Tornado flight sim	£39.95	☐
K-Spread 4 spreadsheet	£89.95	☐
K-Data database	£39.95	☐
ROM Kernel - Includes & Autodocs	£36.00	☐
ROM Kernel - Libraries	£36.00	☐
The AmigaDOS Manual	£24.00	☐

Name:

Address:

Please send me the software/books that I have selected, together with my free Managing with Fax book (worth £12.95) and disk wallet (worth £2). I wish to pay by:
☐ Cheque/Postal Order ☐ Credit card ☐ Debit card

Card No

Signature Expiry Date

HiSoft
The Old School, Greenfield, Bedford MK45 5DE

COMMODORE ATARI CITIZEN STAR AMSTRAD CUMANA PHILIPS GOLDEN IMAGE NAKSHA ABACUS SEGA DIGITA

ADPro contender

GVP have announced the imminent release of Mirage, their new image processing software, whose features put it in direct competition with ASDG's industry standard Art Department Professional.

The package will have a full suite of image processing tools, including rotations, transformations, colour correction, and scaling/cropping, and will support a range of scanners and display enhancers.

In addition, GVP claims there will be support for animation, as in the newest version of ADPro, and a sophisticated painting function. The program is designed along modular lines to allow future upgrades to be seamlessly incorporated.

For further details, phone Silica Systems on 081-309 1111.

Simpatica price cut

THE Amiga's only high-level single frame video recording system, Sympatica, has been cut in price to £999 (excl VAT), and now supports Panasonic SVHS and MII video decks.

Optonica, the system's publishers, are offering to send a demo tape showing just what Sympatica is capable of to any reader who phones or writes to request one.

If you're interested, or have just bought a 24-bit card and are wondering what you can do with it, phone Lee Gibson on 0455 558282 for enlightenment.

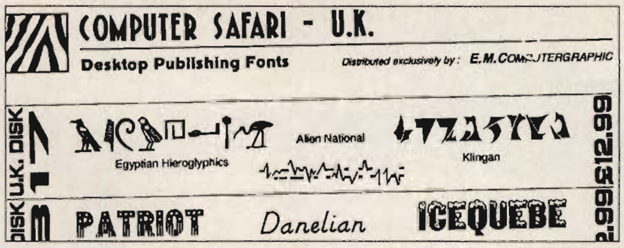
Pro Midi from Microdeal

MICRODEAL should have started to ship their new Pro Midi interface for the Amiga as you read this.

The interface, retailing at £24.95, has Midi in, Midi through, and two Midi outs and claims to be a "full professional standard interface". Microdeal can be contacted on 0726 68020.

Scots on the move

AMIGA Centre Scotland have moved. Their new address is Harlequin House, Walkerburn, Peebleshire, Scotland EH43 6AZ. They can be telephoned on 0896 87583 or faxed on 0986 87456.



Stateside Safari

THE Safari range of PostScript fonts is now available in the UK. EM Computergraphic are exclusive distributors of the fonts, which are highly popular in the US, largely due to their quality and range of styles.

Meanwhile, EMC have also launched the EMC-PD/Shareware library, which intends to address the lack of support and availability of Type 1 fonts for the Amiga. Thirty-three disks are available, in seven volumes, and at £12.50 per 70 or 80 fonts, they represent extremely good value for money.

Font fanatics can phone EMC on 0255 431389 or wait for next month's Updates when we'll be looking at the cream of the EMC crop.

Flicker Free Video gets boost

ICD's Flicker Free Video card (AdFFV) could soon be outperforming all other Amiga flicker fixers thanks to the release of the Flicker Free Video Preferences program.

The program will enable AdFFV users to take advantage of vertical scan rates up to 100.2Hz (given a suitable monitor), but can also be used by owners of Fatter Agnus-equipped Amigas who don't have multisync monitors or flicker fixers.

Higher scan rates result in less noticeable screen flicker, so the program could be ideal for users of software running in interlace mode.

Other features include the ability to adjust Workbench overscan to make maximum use of the display area, and compatibility with Workbench 1.2 and upwards. The program is available to registered AdFFV users for $15, or $29.95 to other Amiga owners by contacting ICD on (0101) 815 968 2228.

Image Engine nears release

G2 Systems, for long the distributors of the Austrian VD2001 24-bit graphics card, are putting the finishing touches to their own 32-bit card, to be known as the Image Engine.

The new board will be based around the increasingly popular Texas Instruments 34020 chip, a dedicated high-power graphics processor, to allow continuous hardware scrolling of a 768 x 574 window, aided by the board's 4Mb VRAM. A real-time 24-bit digitiser capable of handling broadcast resolution images will also feature high in the Image Engine's spec list.

An 8-bit alpha channel will give the card linear keying capabilities previously enjoyed only by Amiga Centre Scotland's Harlequin board, and the Imagica paint software will be bundled free of charge.

Available in two configurations, one for RGB input/output, the other for YC/Composite, the board is aimed at the professional and semi-professional broadcast market.

G2 Systems can be contacted on 0252 737151.

DO YOU KNOW SOMETHING WE DON'T?

Although *Amiga Computing* has scores of contacts in the Amiga world, we need you. If you have some hot news, ring John Butters on the news desk now on 0625 878888 or fax to 0625 879966. All information supplied will be treated in the strictest of confidence.

CONTACTS

TECHNICAL QUERIES

We are happy to answer your technical questions in our ACAS section. Send your letters to **ACAS** at the address below

NEWSDESK

If you have a news story, send it to **John Butters** at the address below. If your story is URGENT call him on **0625 878888** during office hours

GALLERY

We are always on the lookout for good Amiga art. Send your work (as an IFF) to **Amiga Gallery** at the address below

EZRA SURF

Got something to tell other *Amiga Computing* readers? Send your general letters to **Ezra Surf's Postbag (ESP)** at the address below

COMPETITIONS

Enter competitions using the details on the form. If you have any queries contact **Jonathan Maddock** on 0625 878888

PUBLIC DOMAIN SUBMISSIONS

PD libraries are welcome to submit their latest releases. Submissions should include a detailed list of what each disk contains. Jiffy bags to **PD Submissions**

ALMANAC

Our Almanac authors can be contacted via *Amiga Computing*. Please mark any correspondance clearly and send it to the address below

ADVERTISEMENT QUERIES

If you have a query with one of our advertisers which needs resolving please contact **Barbara Newell** on 0625 878888 or write to her at the address below

FAULTY COVERDISKS

If your CoverDisk is faulty send it to: **TIB**, 36-50 Adelaide Street, Bradford BDS OEA

SUBSCRIPTIONS & BACK ISSUES

To subscribe or order back issues please call **Europress Direct** on 051-357 1275. Please note we only hold back issues for six months

THE GRAPHICSTATION

Technical enquiries about the GraphicStation should be sent IN WRITING to **GraphicStation Support** at the address below. Please return faulty disks to the supplier.

COMMENTS

If you have any comments about the editorial content of Amiga Computing please write to the editor **Stevie Kennedy** at the address below.

TELEPHONE CALLS

Except in the situations listed above we **cannot accept telephone enquiries**. Please write in to one of the departments listed in this panel

SAVE THOSE SAEs!

Please don't send us SAEs, we can't promise to reply to every letter so it really is a waste of your stamp. Sorry!

AMIGA COMPUTING
EUROPA HOUSE
ADLINGTON PARK
MACCLESFIELD
SK10 4NP

Third parties dominate show

Whats New USA

By Denny Atkin

The April World of Commodore/Amiga show was held at Pier 88 at the New York City Passenger Ship Terminal.

The terminal being used as an exhibition hall was sandwiched between the retired aircraft carrier USS Intrepid and the Queen Elizabeth 2, which was in port picking up passengers.

Unfortunately, many attendees felt the view of the neighbouring ships was more interesting than the Commodore booth.

According to a Commodore marketing executive, the company decided not to introduce any new products at the show in order not to distract from the third-party exhibitors. If this was really their goal, they succeeded remarkably.

Although most US users are well-aware of the recent European hardware releases such as the A600HD and 386SX Bridgeboard, Commodore would only issue a "no comment" about the new hardware developments.

The only products on display were Amiga 500s, 3000s, 3000Ts, and CDTV units.

Off the mark

Not that the US Amiga market is anxiously awaiting the Amiga 600 anyway, with a 25MHz 386SX-based PC clone – complete with Super VGA monitor and hard drive – selling here for about the equivalent of £575, users in the States want more performance from their Amigas than a pokey 7.14MHz 68000 chip can supply.

The general perception here is that Commodore needs to introduce a fast, inexpensive Amiga with a better graphics chip set before the year is out if they want to remain in the US market.

Mr Gould's recent comments about not perceiving a need for a 68020 processor in an A500-level machine, combined with Commodore's lack of announcements at the World of Commodore show, haven't done much to boost the hopes of worried Amigans here. As of this writing, we still don't even have the A500Plus available here!

GVP Steal the show

There was life outside the Commodore booth, however. By far the busiest – and most exciting – booth of the show was GVP's. With no fewer than ten new product introductions, GVP proved to be the leader in US Amiga development.

The show-stealer was the EGS-110/24 Enhanced Graphics System for the A2000. This high-performance 24-bit graphics card offers fully-programmable pixel rates, allowing it to display virtually any horizontal and vertical resolution, from standard NTSC, PAL, and Secam resolutions all the way up to 1,600 x 1,280 in full 24-bit colour.

There's even a special 256-colour, 12.5MHz mode that allows 3,200 x 2,560 pixels! The board plugs directly into a GVP 68030 or 68040 Combo accelerator for the 2000, and uses high speed VRAM (Video RAM) chips in conjunction with the Combo's microprocessor for speedy graphics updates.

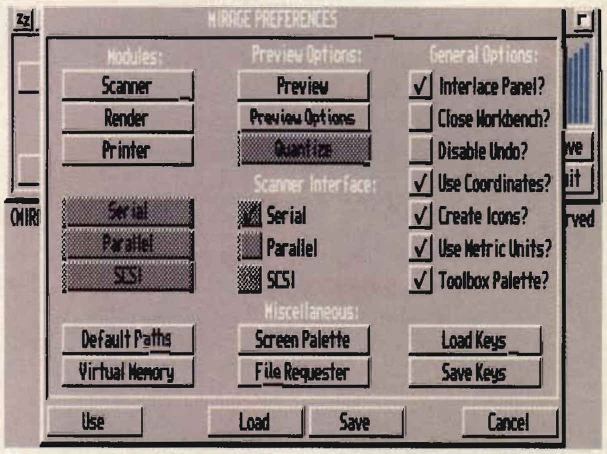
The neatest aspect of the EGS board, though, is the included EGS Workbench driver. This program patches the Amiga's Workbench libraries to allow most programs to open on the EGS board's screen.

At the show they demonstrated Workbench 2.04 and PageStream running in 256 colours at 1,024 x 768 resolution. And the screen updates at this resolution were faster than a normal four-colour Workbench screen!

All this power comes at a steep price, though. You'll need a GVP Combo accelerator (a representative at the show hinted that a version of the EGS board for the 3000 may be release at a later date), and the 4Mb version of the board costs $2,699. The 8Mb version sells for $3,399. Still, how much is too much for the ultimate graphics adaptor?

The other hit of the show was the new Mirage image processing/retouching software developed by upstart Nova Design, to be marketed by GVP.

I've been working with a beta of the program for a few days now, and I'm very impressed. In the same class of software as ASDG's Art Department Professional and Black Belt Systems' ImageMaster, Mirage combines powerful image processing tools, true-colour painting, full animation support, and a fantastic user interface to set a new standard in professional image tools.



A preliminary version of the Preferences screen for GVP's Mirage

Unlike other programs, Mirage doesn't force you to add tons of RAM to your Amiga to process large images – it can use your hard drive as fast virtual memory. You can now work on huge images with only 3Mb of RAM in your Amiga.

Mirage will directly display its images in regular and ECS Amiga modes, and on the DCTV, HAM-E, IV-24, DMI Resolver, Firecracker 24, and even the Video Toaster.

Bezier curvers

You can draw Bezier curves, and the program has a full undo capability. The program can load and save just about every popular format, including IFF, ANIM, JPEG, GIF, Rendition, Sculpt, TIFF, Targa, and PCX, and other modules can be added later.

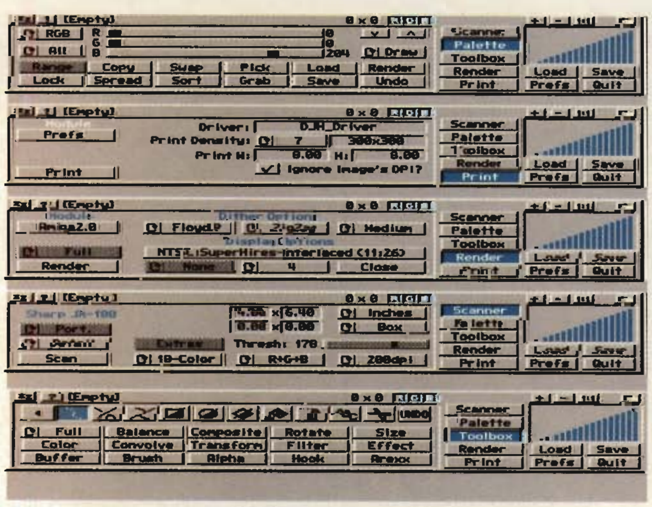
It will include a number of unique image-processing functions, including one that can make digitised images look just like oil paintings. If a function is missing, you can add it using ARexx or C, as Mirage includes information on how to create your own add-on modules. Priced at $249, Mirage sets a new standard for features and ease of use.

Amiga 500 owners will be dazzled by the A530 Turbo. The device looks unassumingly like a stock GVP Series II HD8+ hard drive interface. However, along with the high-performance SCSI interface and mini-slot for a GVP PC emulator, the A530 Turbo also includes a 40MHz 68EC030 accelerator that outruns an Amiga 3000.

The board includes sockets for up to 8Mb of fast 32-bit RAM, and room for a 68882 math co-processor. Prices in the US start at $999 with no RAM and a 52Mb Quantum hard drive.

GVP were also showing the G-Force 040 Combo ($2,499), a 25 or 33MHz 68040 board for the Amiga 2000 that includes SCSI, serial and parallel ports, and PhonePak ($449), an incredible new board for the 2000 and 3000 that does voice-mail, fax send and receive, and the unique new "FaxMail" messages – faxes with digitised voice description attached.

On display too were the PC/286 module, which is essentially an ATonce-Plus board miniaturised to fit in the expansion slot in a GVP A500 hard drive interface; two video interface board for the IV-24 that add composite, S-VHS, and component video in-out; and the I/O Extender ($299) – an A2000/3000 board with a parallel port and two Midi-capable serial ports.

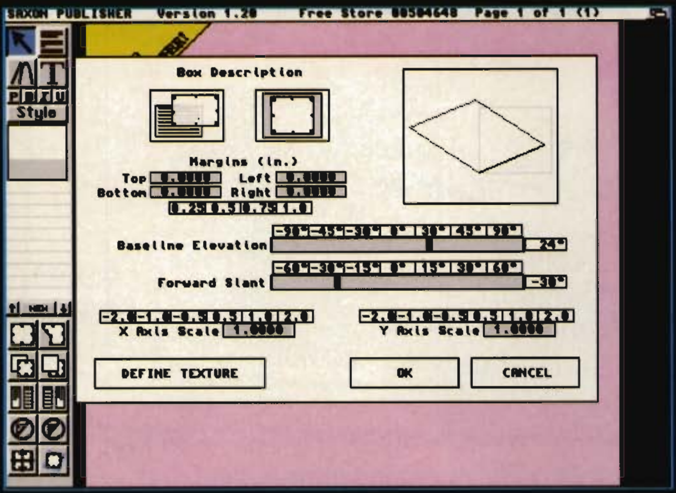


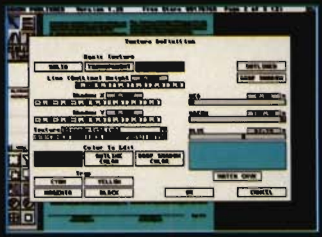
The control panels for GVP's Mirage

£100 DISCOUNT OFFER!

SAXON PUBLISHER V1.2

The New Standard In Desktop Publishing











Saxon Publisher V1.2 represents an entirely new dimension in page layout software. Offering levels of performance, versatility and sheer speed unmatched by competing packages. And featuring technical innovations like APEX™, our proprietary industry leading colour separation model.

No matter what your desktop publishing needs are, *Saxon Publisher* is the only publishing package you require. With direct support for Adobe Type 1 fonts in *Macintosh*, *IBM-PC*, and *Amiga* formats, literally thousands of typefaces are available at your disposal. The included *font conversion software* further allow you to convert *Compugraphic* and *Adobe Type 3 fonts* into a variety of Type 1 formats. Import filters are also provided for today's most popular graphics formats — *IFF*, *EPS*, *AEPS* and *DR2D* — as well as for *ProWrite* and *Excellence!* text files.

Saxon Publisher is the only desktop publisher which includes a free *PostScript interpreter* in every package. Featuring true *virtual memory* (emulating that on UNIX systems), automatic sensing of all Amiga *accelerators* and *math co-processors*, and the unique ability to *convert* PostScript objects into a variety of PostScript and non-PostScript formats, the interpreter ensures high quality output at any resolution. You can even proof your files directly to screen as *full-colour PostScript* at up to 360 dpi!



Colour separations produced using Saxon Publisher's proprietary APEXTM colour separation technology are resplendent with a vibrance and colour accuracy previously unheard of in digital pre-press.



300 dpi HP Laserjet Screen emulation. Every single printer pixel is faithfully reproduced

For additional information about any Saxon Industries product, please contact the authorized distributors listed below:



These two letters serve to illustrate the versatility of bitmapped textures within type styles. Bitmapped texture backgrounds can be applied to any user specified blocks of text regardless of size, font, or spatial orientation.

SKEWING

Saxon Publishers user friendly controls allows text and graphics to be skewed in conjunction with rotation and scaling within a matter of seconds. Notice how drop shadows are correspondingly affected.

SURFACE U.K. LIMITED
5 Rockware Avenue
Greenford
Middx UB6 OAA
Telephone: 081 813 0170
Fax: 081 566 6678

Or alternatively please call:

H.B. MARKETING
Telephone: 0753 686000

DYNAMITE



NEW AMIGA A600

- ★ ON SITE MAINTENANCE
- ★ SMART CARD FACILITY
- ★ BUILT IN TV MODULATOR
- ★ COMPACT HARD DRIVE OPTION

A600 STARTER PACK £364.95
A600HD + 20Mb HARD DRIVE £459.95

AMIGA 1500 PACK

FEATURING

★ LATEST MODEL INCORPORATING Workbench, Kickstart 2.0
★ GETTING THE MOST OUT OF YOUR AMIGA (book)
★ PLUS: Home Accounts, Platinum Workds, Deluxe Paint III, Puzznic, Elf & Toki

£539.95

NB This machine is designed for use with a monitor **(See Offer)** Alternatively a TV Modulator can be purchased for £19.99

★ AMIGA A500/PLUS PACKS ★

1.3 STANDARD A500 .... £259.95
A500 PLUS STANDARD PACK £309.95
A500 PLUS CARTOON CLASSICS £324.95

See our memory section to upgrade above

Limited Special Offer

UNBEATABLE MONITOR DEALS. SAVE £££'s

COMMODORE 1084S £199.95
PHILIPS 8833 MKII £184.95
GOLDSTAR TV/MONITOR £159.95

These prices are only applicable when a monitor is purchased with any Amiga. Add £15 if you wish to purchase them separately

★ GREAT VALLEY PRODUCTS ★
2 YEAR WARRANTY
★ HARD DRIVES ★

A500:

SERIES II HD 8+ 52Mb........ £334.95
SERIES II HD 8+ 105Mb..... £439.95

A1500/2000:

SERIES II HC 8+ 52Mb........ £264.95
(Configurations up to 420Mb 8Mb RAM available please call)

NEW HARD DRIVE + ACCELERATOR

THE ULTIMATE A500 EXPANSION PRODUCT!

£659.95

A530 Combo, 40Mhz Accelerator + *52Mb Hard Disk *1Mb Ram
* Up to 8Mb Ram and 120Mb/240Mb versions available - Call

★ PC 286 EMULATOR★

PC 286 16Mhz EMULATOR MODULE = **£219.95**
For the series II and A530 hard drives

Easy installation that does not invalidate your warranty

STEREO COLOUR MONITORS

COMMODORE 1084S **£214.95**

PHILIPS 8833MKII **£199.95**

Free F19 Stealth + 12 months on-site maintenance

*** CABLE TO YOUR COMPUTER ONLY £3.99 WHEN PURCHASED WITH MONITOR**

★ DISK DRIVES ★

ALL OUR DRIVES INCLUDE:
TEN x 3.5" DISKS + 3.5" CLEANER KIT
FREE OF CHARGE

✻ DIRECT A500 INTERNAL REPLACEMENT £39.95
✻ CUMANA CAX 354 Slimline Design £49.95
✻ Power PC880E Featuring Anti-click device £49.95
✻ Power PC880B with Blitz/virus hardware £69.95

★ This offer will run for a limited period only ★

NEW A570/A670 CD-ROM DRIVE

COMING SOON - ORDER YOURS NOW!

A570 CDTV + INTERFACE For the Amiga 500 Plus.................. £269.95
A570 CDTV + INTERFACE Plus V.2 upgrade for A500 1.3 .... £314.95
A670 CDTV + INTERFACE For the Amiga 600 .... £269.95

The above products are expected imminently so place your order now to avoid disappointment

KLONDIKE DEALS

DYNAMITE COMPUTERS DIG DEEP FOR THESE SPECIAL BARGAINS.....

★ CLEARANCE AMIGA SOFTWARE ★

* BACK TO THE FUTURE II	£3.99	* HOLLYWOOD COLLECTION	£9.99
* NIGHTBREED	£3.99	ADDICTED TO FUN	£12.99
* DAYS OF THUNDER	£3.99	ROBOCOP 3	£12.99
SHADOW OF THE BEAST II	£4.99	W.W.F.	£12.99
CAPTAIN PLANET	£4.99	TERMINATOR 2	£12.99
LEMMINGS	£4.99	JIMMY WHITES SNOOKER	£12.99
BART SIMPSON	£7.99	OUTRUN EUROPA	£12.99
MEGLOMANIA	£9.99	ASTRA TEN STAR GAMES PACK	£17.99

N.B * DENOTES NOT PLUS/A600 COMPATIBLE

COMPUTERS

THE PRICE BLASTERS

★ ART STUDIO ★

Deluxe Paint II	£9.99
Spritz Paint	£9.99
Deluxe Paint III	£14.99
Fantavision	£14.99
Comic Setter	£19.99
Photon Paint V2.0	£19.99
Deluxe Paint IV	£54.99
Walt Disney Animator	£64.99
Professional Draw V.2.	£89.99

★ VIDEO STUDIO ★

Vidi Amiga + Vidi Chrome	£69.99
Rombo RGB Splitter	£39.99
Take 2 Animation Package	£59.99
Complete Colour Solution	£99.99
Colour Solution + Take 2	£129.99
Rocgen Genlock	£84.99
Rocgen Plus Genlock	£129.95
Scala 500	£69.95
Scala (requires 1Mb)	£149.95
Roctec Genlock	£99.95

★ SOUND STUDIO ★

Music X Junior	£19.99
Midi-Master Interface + 2 Midi Cables + Music X Junior	£29.99
Music X 1.1	£49.99
Rombo Mega-Mix	£29.99
GVP Sound Studio	£49.95
Bars and Pipes	£89.95
Bars and Pipes Pro	£179.95

HOW TO ORDER

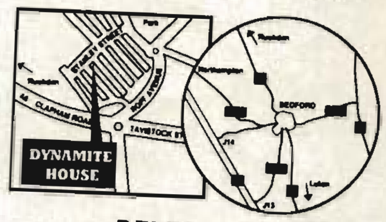
Access — Call us NOW on 0234 214212 — VISA

Send Cheque or postal order to
DYNAMITE COMPUTERS
Dynamite House
44a Stanley Street
Bedford MK41 7RW

NB Please write cheque guarantee card number on the reverse of cheque to ensure same day clearance (cheques without card number subject to 10 day clearance)

Call into our showroom for a fast and friendly service

Retail/Queries 0234 364428



DELIVERY CHARGES*
£2.95 for orders less than £100
£4.95 for orders over £100
Next day express service £7.50
Saturday delivery only £15.00
* Charges applicable to UK mainland only

PLATINUM SERVICE CARD
Only £19.99!
Features: • Next day courier delivery
• 30 day exchange for new
• 1 year guarantee giving free collection and delivery should a fault occur.

All prices subject to availablility and may change without notice. E & OE

★ STAR/CITIZEN ★ PRINTERS

CITIZEN 120D+	£109.95
STAR LC20	£119.95
CITIZEN SWIFT 9	£169.95
STAR LC200	£169.95
STAR LC24-20 (NEW)	£179.95
STAR LC24-200 (MONO)	£199.95
CITIZEN 224	£209.95
STAR SJ48 BUBBLEJET	£214.95
STAR LC24-200 (COLOUR)	£249.95
* CITIZEN SWIFT 24e	£264.95

* Complete with free colour kit whilst stocks last

ACCESSORIES

PARALLEL PRINTER CABLE	£3.99
UNIVERSAL PRINTER STAND	£3.99
200 SHEETS OF CONTINUOUS PAPER	£1.99
COLOUR KIT OPTION FOR SWIFT 9/224/24e	£34.99

★ POWER HAND SCANNER ★

FEATURING:
★ LATEST VERSION 2 SOFTWARE
★ 64 GRAYSCALES
★ 100 - 400 DPI

PLUS FREE PHOTON PAINT 2.0 (RRP £89.95)
A DYNAMITE EXCLUSIVE AT £99.95

★ MEMORY ★

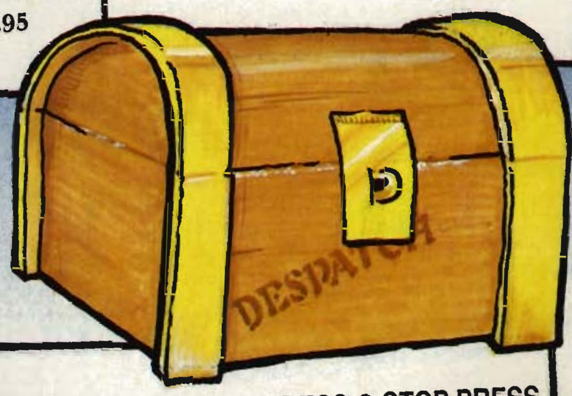
512k RAM EXPANSION (1.3)	£15.95
512k RAM EXPANSION PLUS CLOCK	£19.95
1Mb RAM EXPANSION (A500 PLUS)	£29.95
1Mb by 8 SIMM Boards (GVP)	£26.95
4Mb by 9 SIMMS (GVP)	£109.95

A500 RAM BOARDS
(fully auto config/full thru' port)

2Mb	£119.95
4Mb	£179.95
8Mb	£279.95

ACCESSORIES/EXTRAS

10 BLANK DISKS (3.5 DS/DD)	£3.99
50 BLANK DISKS (3.5 DS/DD)	£17.99
QUALITY MOUSEPAD	£1.99
40 CAPACITY LOCKABLE BOX	£2.99
80 CAPACITY LOCKABLE BOX	£4.49
ROLL OF 1000 3.5" DISK LABELS	£6.99
MOUSE/JOYSTICK Switcher box unit	£9.95
ZIPSTICK SUPERPRO JOYSTICK	£9.99
QUICKJOY TOP -STAR JOYSTICK	£14.99
AMIGA SOFT DUSTCOVER	£3.99
AMIGA PERSPEX DUSTCOVER	£9.99
REPLACEMENT MOUSE	£9.99
REPLACEMENT TV MODULATOR	£19.95
REPLACEMENT POWER SUPPLY	£29.95



TO PLACE YOUR ORDER PHONE THE DYNAMITE HOTLINE

0234 214212

DYNAMITE HOUSE, 44a STANLEY STREET, BEDFORD

STOP PRESS • STOP PRESS • STOP PRESS

PUBLISHERS CHOICE SCOOP*

COMPRISES: TUTORIAL, KINDWORDS 2 (WORDPROCESSOR) PAGESETTER + HEADLINE FONTS + ARTISTS CHOICE (EASY DTP)

This pack used to come with the Amiga 'Class of 90's' Pack but we've managed to source a few and are able to offer them at the giveaway price of **£19.95**

* **N.B. This package is NOT Plus/A600 compatible**

The page makers

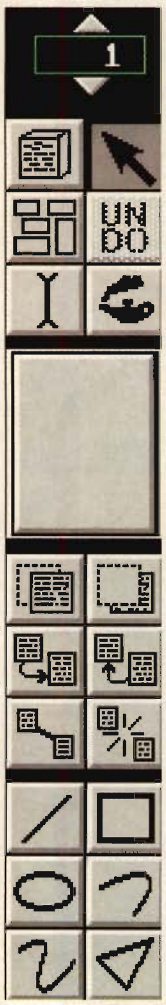
A top typographical trio go head to head in *AC*'s battle of the DTP giants

The Amiga is more than a match for the best that the IBMs and Apples of this world can come up with as regards the power and complexity of its DTP packages.

With the universal PostScript standard becoming the norm for Amiga DTP output, no-one with an interest in publishing – from flyers to books – can afford to ignore the Commodore machine.

Here the *AC* team look at the three market-leading products, talk to a prominent print bureau, and open the lid on the world of Amiga DTP.

ProPage 3.0



If you're well versed in the ever-changing world of Amiga DTP you may already be aware that ProPage – or Professional Page as the authors would have us call it – has only recently had a revision from v2.0 to v2.1.

In truth this minor upgrade was no more than a bug fix prior to the major release of v3.0. After an agonising wait the new version has finally arrived, but was it worth the wait?

After a brief glance at the improved features list it appears to have been exactly that. In the past the battle between PageStream and ProPage was nothing short of vicious with knees in the groin, thumbs in the eyes, and generally no holds barred, as each package desperately vied for the top spot.

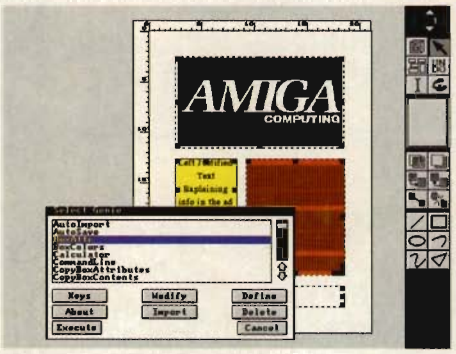
Although this is still the case as far as sales are concerned, there's been a subtle change in direction that means that the two giants are perhaps starting to heading in slightly different directions.

Although others may disagree, I feel that there's been a slight shift in general approach to DTP, with PageStream going for a more artistic approach, if slightly more complex, while the new ProPage has made impressive moves towards automation, and general simplification of the subject.

Of the big three, it's fair to say ProPage is by far the easiest to master for the novice or occasional user. This doesn't mean pros won't be able to apply its potential effectively.

In fact, if speed is the key factor rather than inspired and ever-changing layouts, neither of the other packages can match ProPage. If you're happy to employ uniform – and dare I say – slightly less than inspired layouts, it's perfect.

The main reason behind the new change of tack is the program's comprehensive ARexx support, which given its 330-odd commands, offers complete control of ProPage via ARexx. If the word ARexx sends as shiver down your spine, don't despair.



Near instant page creation, courtesy of the program's excellent genie options

The program uses what it calls "genies" – ARexx scripts in disguise – which are directly accessible from ProPage at the click of a button. When you boot ProPage 3.0, you'll find that what used to be the Mop tool has been replaced by an Aladdin's lamp button, clicking on which brings up the "genie" requester.

There are over 50 function "genies" already defined, ranging from the simple AllCaps and similar text effects, to box attribute control and even an ADPro "hotlink" which enables bitmap tweaking in ADPro and automatic re-importation.



Yet more friendly assistance thanks to the ProPage tutorial video that comes as part of the package. Shame it's designed for v2.1

As ARexx is being used by more and more programs, the "genie" feature makes ProPage 3.0 a much more powerful tool, and gives the ARexx-conversant user the opportunity to write macros for virtually every situation.

My one complaint concerning "genies" is the lack of an auto-record function. When you click on the Define button, ProPage simply loads up its accompanying Article Editor and expects you to write your own macro. If an auto "genie" generation option had been added, ProPage 3.0 would almost be a "must" rather than a maybe.

As it stands, any would-be serious user would be well advised to burn a little midnight oil on the ARexx manual to properly exploit the option, or alternatively wait for "genie" updates or possible PD releases.

Other improvements include a font conversion utility which will convert Adobe Type 1 PostScript fonts to the Compugraphic fonts which Gold Disk seem determined to stick with. FontManager works well, and the converted fonts are of perfectly good quality.

Nevertheless, it can be a bit slow if you're converting a complete set of PostScript fonts across to your Compugraphic drawer.

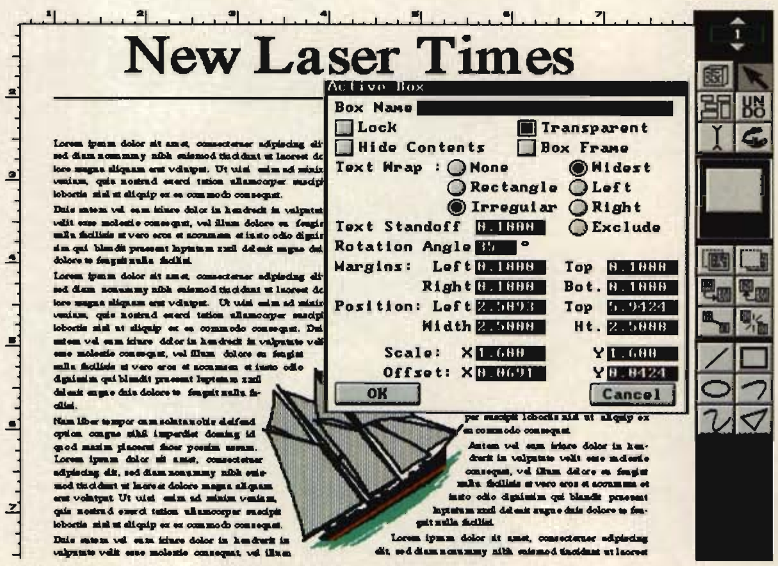
Having said that, its inclusion gives ProPage access to the hundreds of available Adobe Type 1 fonts. As typefaces are the lifeblood of DTP, its inclusion has come as a welcome, and near essential addition. If you don't have access to a font collection, don't despair – Gold Disk have included a selection of nine fonts as standard to get you started.

Another new feature is the addition of an irregular text flow option. Using this, text can be made to flow round the outline of any structured drawing rather than its box, as was previously the case.

Unfortunately, although Gold Disk have at last seen the light, the application of the new option is less than perfect.

Text can flow around the left or right of an object, but not both, so it's still impossible to have a circular hole in your text unless it is at the juncture of two columns and you create an ellipse either side of the gutter.

The direct Hotlink to ProDraw 3.0 – due for release later this year – is probably the last major change from v2.1, and is easily the most attractive to users who employ a lot of clip art or their own struc-



The ever-present box requester, just waiting for a double click to reveal its secrets



Instant assistance thanks to ProPage's online Hyperbook help file which makes the learning curve as painless as possible

tured art within their documents. The user need only click on the box containing the ProDraw clip, select the ProDraw option, and ProDraw is loaded with the clip ready to edited.

In combination with ProDraw 3.0's new Fountain Fill option, which will allow full page gradients, the hotlink adds a great deal of functionality to ProPage, saving a lot of time and hassle if you often employ structured art.

On the graphics front, ProPage is pretty impressive with a good selection of importation options which of course include ProDraw and Aegis Draw for structured art, plus encapsulated PostScript and bitmap graphics which includes 24-bit images.

With the new auto-tiling print option, a long-needed Undo feature, text filters for most American (not British) wordprocessors, plus a few tweaks to the colour separation process, ProPage has come a long way in the trip from v2.1 to v3.0.

There are still areas in need of improvement, but in general, Gold Disk have done a fine job in boosting the package. My main bone of contention concerning the latest version is program's insistence on sticking with the irritating need for boxes with everything.

No matter how small the amount of text or minuscule the graphic, a box is required prior to importation, unlike PageStream which happily imports text directly into predefined columns or adds graphics directly onto the page.

Another minor inconvenience is the inability to define text as an object and then resize by simply dragging its box, although having said that text can be resized relatively simply by highlighting the text and redefining the point size, or alternatively employing the program's impressive style tagging talents to resize to a predefined size or style.



Saxon's flexible box shapes can aid in the design of unconventional layouts

Last on the moan list comes the inability to define zoom, although five predefined degrees of zoom are available as standard. On the plus side, this minor point is more than made up for by the excellent option to specify interruptible refresh, an option which soon become indispensable.

As mentioned earlier, perhaps the biggest attraction of the program to the new user has to be the friendly "genie" system which even allows creation of entire documents from predefined formats which come as standard with the software.

These vary from business reports to full page ads and twin fold brochures, to name a few. All the potential user need do is fill in the gaps with assorted text and graphics while the program automatically adds all the details and page positions.

As a result, a document can be started and sent to print in a matter of minutes, but as I mentioned earlier the use of "genies" does tend to create rather uniform and slightly uninspired output, which is compounded slightly by the program's tendency for rather angular layouts.

In general, ProPage is ideal for the beginner and expandable enough for the expert. Also, its interact hotlinked design with additional programs such as Adpro and its own Article Editor make it a very impressive DTP workstation.

If you're looking for a friendly introduction to DTP that will grow with your experience, ProPage is ideal.

Paul Austin

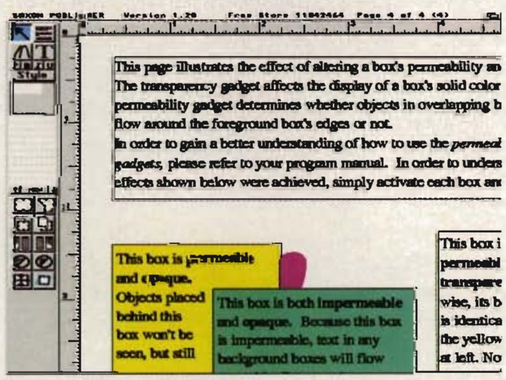
Saxon Publisher

Although it falls a little short of being a dream for serious DTP enthusiasts, Saxon Publisher has a wealth of features which make it worth a good look before making up your mind which package to go for. But be warned – Saxon is not a cheap option.

The emphasis truly has to be on the word "serious", not only because of what you can achieve with this package, but also because of its relatively high cost, the hardware you need to run it properly, and the output devices it can drive. it now also comes complete with Saxon Script Professional Interpreter, giving acess to the wonderful world of PostScript output.

When I reviewed v1.1 of this package just over a year ago, my conclusions were that it would see far more business than home use, that it was bound to improve with subsequent versions, and that more fonts, printer drivers and the odd cosmetic improvement would help.

In fact, version 1.1 was never released in the UK, so 1.2, which has just become available, is actually Saxon's debut version.



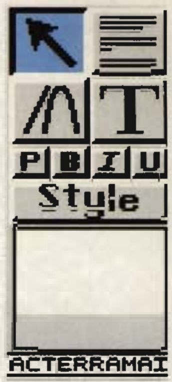
Box styles and textures give the designer a wide degree of choice

The addition of a fully independent PostScript interpreter, the ability to use a whole host of Adobe and Compugraphic fonts, a monitor calibration utility to ensure accurate on-screen colours, and – most significant – a dramatic increase in the screen refresh rate and general speed of the package, shows it is moving in the right direction.

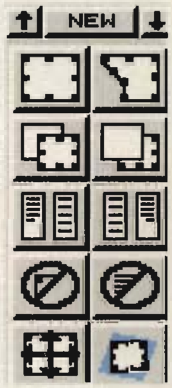
However, I would still like to see some improvements in the way Saxon Publisher operates.

First, though, a potted description of this very hot contender for the title Most Polished Amiga DTP Package of the Moment.

The view of your publishing world comprises a sidebar containing, among other things, selection gadgets for four operating modes – cursor, paragraph, drawing and text. Those other things include type style icons (bold, italic and so on), screen position gadget (for moving around your page when you've magnified your view and parts of it are therefore hidden), and rectangular and freeform box drawing tools.



The sidebar also holds a list box which displays filenames of stories and pictures (if you've imported some, that is) to be inserted in your document, or typestyle names if you're in paragraph mode, some extremely useful vertical justification gadgets, two tools for deleting boxes or their contents, a box-moving gadget and a graphic-fitting gadget.



In paragraph mode, you also see style transfer gadgets, another very useful feature which allows you to impose the style of a highlighted paragraph onto an entire section of text appearing either before or after it.

In drawing mode, your line, rectangle, ellipse, circle and other basic artist's tools are displayed in the sidebar.

In some of the modes, Saxon disables some of its facilities – for instance, in text mode, on-screen colours, internally created structured drawings, drop shadows and outlines will not be shown, to speed up screen refreshes.

Switching back to cursor mode will provide you with the complete picture of your achievement so far.

Important though the sidebar is, you could hardly get by without altering type specifications, being able to set your preferences, import text and graphics and perform the other operations vital to a decent document. For these, click the right mouse button in the time-honoured Amiga way, and a menu bar which for the most part is fairly self-explanatory will appear.

Selecting a sub-menu will, as likely as not, cause a requester to appear. Be warned that many of the details in the requesters are quite tiny, and a hit every time, especially with an accelerated mouse, is not guaranteed.

Also, I don't very much like the method of choosing typefaces – clicking on one of

stereo MASTER

When you are considering purchasing a sound sampler there are plenty to choose from. Why compromise? your choice should be the new full featured STEREO MASTER for the Amiga, with software that is designed from our top selling Amiga sampler AMAS and a package that gives you more extras than a M series BMW. By purchasing this state of the art product which combines a quality sampler with the expertise of over 10 years of software programming, you are purchasing a top quality product with the knowledge that it is not only compatible with existing Microdeal products but will also be with future ones.

What is Stereo Master

Stereo Master is a low cost, high quality sound sampler for the Amiga range of computers. The sampler cartridge included in this package plugs into the printer port at the rear of the computer and allows you to analyze the sounds coming in from devices such as Personal Cassette Players, Compact Disc Players etc. or change the way they sound using the Real Time Special Effects or record them. Once in the computer STEREO MASTERS unique editor will enable you to edit the sound in practically any way you can imagine. Once you have the sound sample how you want it, you may incorporate it into your own Demo's or use STEREO MASTERS own built in sample sequencer to play back the sample in sequence with other samples!



MAIN SCREEN

The Sampling Software

Every feature you would expect to find in a professional editing suite including;

- Real time record/play ghost markers
- Cut or Delete selected sample area
- Mix sample with full or half volume
- Shrink in by 25%/50%/75% by drag or wipe
- Fade in/out with selectable degree of fade
- Filter sample with soft/medium/hard filter
- Selectable trigger volumes
- Record frequency from 3.0 to 55.9 Khz
- Full editing and control facility for left/right channels
- Playback volumes
- Decrease volume
- Increase volume
- Bounce sample
- Paste sample
- Trigger recording
- Clear left/right samples
- Loop sample



THE SPECIAL EFFECTS CONTROL PANEL

The Special Effects Software

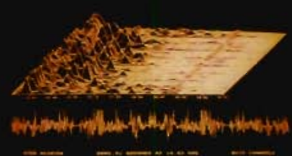
For the first time ever you can emulate special sound effects in real time just like the sound labs can for film studios, normally the hardware to produce these effects would cost 100's of times more than this package. Features on the FX menu include;

- Built in real time special effects including Echo, Reverb, Ramp, Pitch up/down, Stereo bounce, Multi echo Chorus, Phaser, Reverse and Pitch bend.
- Fully programmable special effects so that customised effects can be recalled

The Analytical Software

A whole host of pro-type analytical functions include;

- 3D display of sample frequencies (Fast fourier transform)
- 3D display also includes 2D envelope display plus sample information.
- Built in Stereo spectrum analyzer
- Stereo Oscilloscopes with trigger markers



3D DISPLAY OF SAMPLE FREQUENCIES (FFT)



STEREO SPECTRUM ANALYZERS



STEREO OSCILLOSCOPES



THE SEQUENCER CONTROL PANEL

The Sequencing Software

Our built in sample sequencer allows you to take up to 18 samples (memory permitting) and sequence them into your own "tronic" mixes, features on the sequencer include;

- Real time entry of sequences from keypad
- Step time entry of sequences
- 2 stereo channels for sequencing
- Storyboard style editing
- Digital sequence position display
- Fast forward/rewind controls
- Program sample to keypad
- Stand alone demo player displays IFF picture whilst playing sequence
- Sequence copy function
- Loop sample
- Selectable sequence speed
- Dump/re-edit function
- Test function
- 2 octave playback
- Insert/delete sample in step time

microdeal

Other innovative features

We know this product is years ahead of its time and these additional features justify our boast;

- New style stereo cartridge
- Produces stand alone executable sample files
- Fully multi tasking
- Saves in IFF/Raw/Instrument1/3/5 Octave
- Includes walkman type cable
- PAL/NTSC full screen display
- Can create workbench icons
- Save customised settings

AMIGA **STEREO MASTER ORDER FORM** AMIGA

STEREO MASTER IS £39.95 Post & Packing £1 (All prices inc. V.A.T.)

BY PHONE WITH CREDIT CARD



(0726) 68020

BY POST With cheque, Postal Order or Credit Cards.

Name...

Address...

....

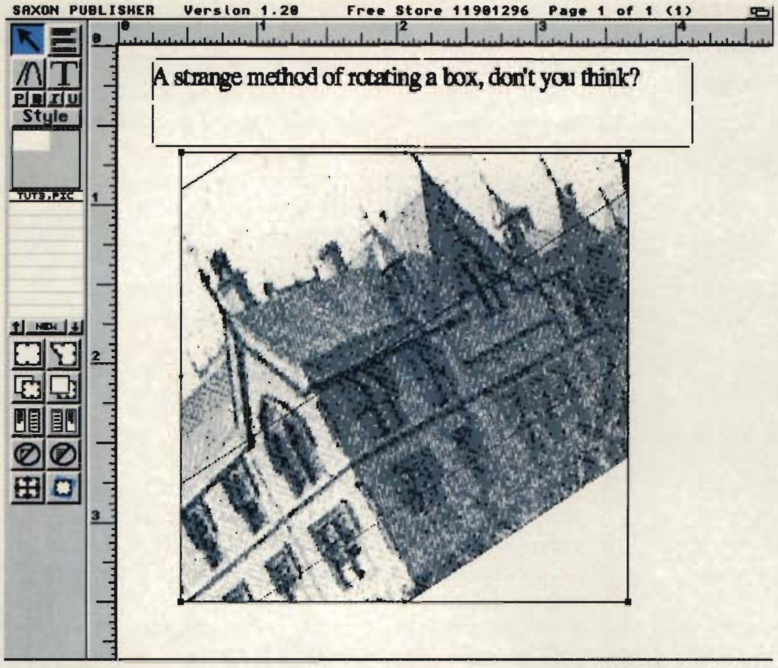
....Postcode...............................

Credit Card Type..............................Expiry Date...............

Number...

Please allow 28 days for delivery

SEND TO: Microdeal PO BOX 68 St Austell Cornwall England PL25 4YB



Saxon rotates the contents of a box rather than the box frame, which can cause problems

the letters of the alphabet will, if you're lucky, bring up the name of a font beginning with your selected letter in a field above.

But there's nothing under some letters, while others, quite naturally, have more than one font associated with them, so you have to make another selection. It's a simple view, but I'm convinced the best way to choose a font is from a list of fonts!

The basic idea is to import the text and graphics you want to go into your document (a variety of file formats is catered for in each case), draw the boxes they are to go into on your page(s) and place the files and graphics into the boxes simply by pointing and clicking on boxes and items in your list.

You then format your text using default or custom tags from your other list, adding colour and, if you like, tilting graphics and/or text to taste. You can also add a headline or two, and some picture captions if you wish.

Easy, isn't it? Well, it does take a couple of tutorials (in the manual, I'm afraid, not interactive ones on disk) to get the hang of it.

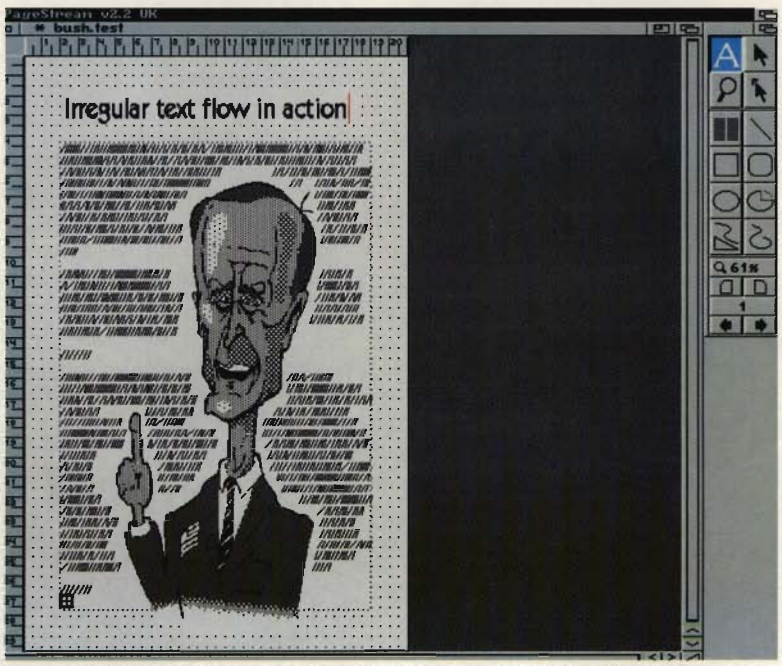
Drawbacks

So what about those other operational drawbacks hinted at earlier? Let's take rotation of boxes (the bounded areas whose size the user specifies, and which hold the text and graphics of your documents). The problem with Saxon's box rotation is that it doesn't exist.

Fair enough, you can click on Alter Active in the Box menu and specify any angle you like in the requester that comes up, but after you've OKed it, you find that only the angle of your box's content is re-aligned at the new angle. What you get is sloping text within the existing parameters.

With graphics, the result is different – you are apt to lose the corners of you piccy as the picture's margins move with it, while the box maintains its position.

I searched in vain for a way of rotating the box and its contents together. On re-reading the manual (which incidentally has not changed from the one which came with v1.1 last year, although there is a supplement to it detailing changes) I found the following:



PageStream is the only current DTP package to employ completely irregular text runaround

"If you do lose a portion of your image, you can easily reshape your box or alternatively move the graphic in such a way that it becomes fully visible again.

"If your box contains text, you will notice that the program will still respect the specified margins (of both the text block and the bounding box) in determining text flow. Depending on the effect that you are trying to achieve, you may reset the box margins or alternatively reshape your boxes..."

It sounds almost reasonable until you try to reshape your box by grabbing its handles with you pointer. If you want a square box to have a 30-degree tilt, but wish to keep the corners of your box at 90 degrees, for instance, maintaining those corners will severely test your patience.

Re-aligning a complex polygon could have you reaching for the Valium. Although it is quite possible to achieve complex, even dazzling results with Saxon and a liberal amount of patience, today's professional market will want it to be quicker and easier.

The home enthusiast who invests in this package might, on the other hand, be willing to forgo the ease of use the pros have come to expect after the likes of Aldus PageMaker and Quark XPress – but only in return for an inexpensive package which operates on low-spec hardware.

And there's another problem. Although you can get away with two floppy drives, and the manual states the program functions properly with any standard Amiga display, you really need a hard disk and to be in hi-res to do justice to Saxon.

Hi-res on the Amiga means you get that annoying flicker problem, so a high persistence monitor is really the order of the Saxon day.

To complete the moans section before moving on to the positive side, it appears that Saxon lacks one of the most fundamental requirements of those who make errors (and who doesn't?) – an Undo facility.

Also – and I accept this is a general criticism of the way most programs work on the Amiga – can Saxon please do something about the file requesters?

Why, oh why can't we have fields in requesters which are editable by highlighting and then typing to replace what is already there, rather than being restricted to delete keys and Amiga-X to clear out the original contents? Such a simple improvement could save so much time. So much for the downside. What are the truly positive aspects of Saxon?

It's robust. Apart from a few annoying niggles, it's built for the job of serious DTP. It handles colour – both on-screen and as output – extremely well, and has plenty of features like textures – including fades, radials and stone bricks – drop shadows, kerning, vertical justification, box layering and easily controllable text runarounds.

With its additional font facilities and PostScript interpreter, it is seems Saxon will make the professional grade. What it needs now are a few improvements like easy box rotation, and customised requesters which make it easier to select options.

Saxon's cost and hardware demands will put it out of reach of many home users, but if you're keen and can afford it, it's certainly one to go for, especially if you're a perfectionist when it comes to the finished job.

Richard Williams

PageStream 2.2

In its earliest incarnations, SoftLogik's PageStream suffered by comparison to ProPage because of its quirky user interface and its various glitches and idiosyncrasies, such as the non-interlaced screen's refusal to recompute the vertical ruler to its proper size.

With the latest version, however, PageStream has sorted itself out and is now much smoother in use. To the beginner, PageStream 2.2 now offers a much less painful introduction to DTP.

Its redesigned user interface is logical, consistent, and about as standard as Amiga programs get, utilising fairly universal key combinations for most actions.

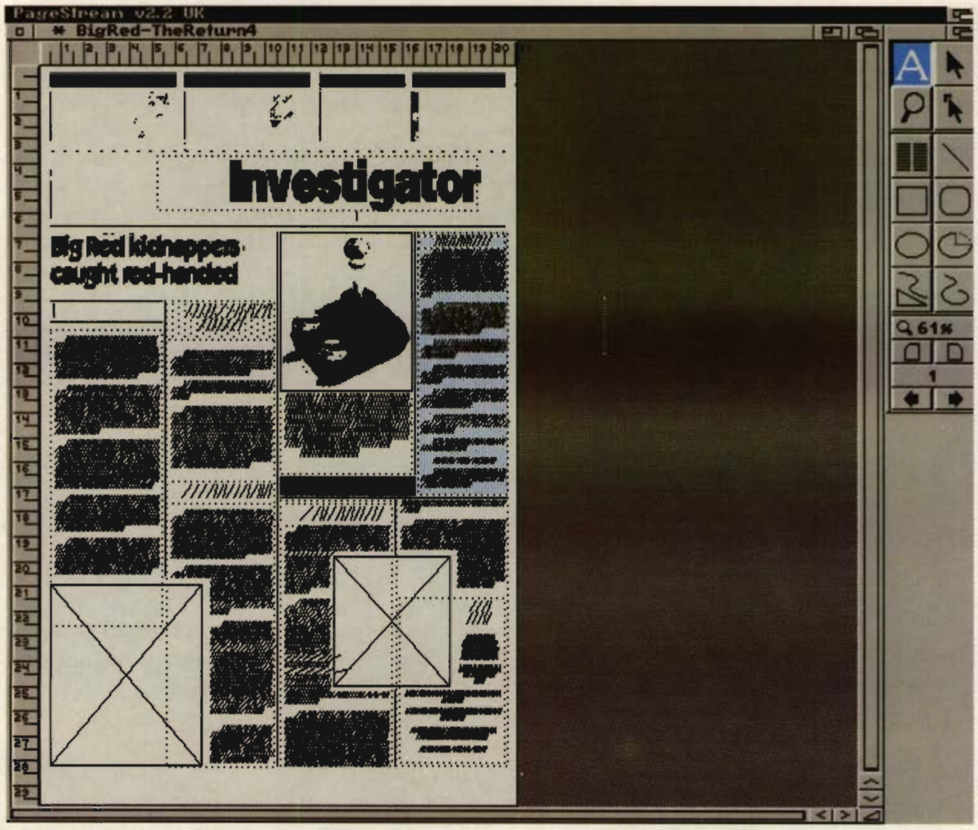
This means that when you hold down Right-Amiga-A to select all of the current text, you don't get a style tags requester as you do in ProPage.

Its "frameless" approach means you don't have to define a box before importing a graphic file and makes possible the direct typing of headlines and so on.

Anything typed directly onto the page becomes a text object once it's been created, of course, but for beginners who just want to get up and running PageStream is friendly enough to enable a flyer or leaflet to be completed within a couple of hours of opening the box, almost without looking at the manual.

The user's smooth introduction to PageStream is helped immensely by its thorough implementation of Workbench 2.0-style requesters. This has been done so well that even when faced with an entirely new requester, the user should feel familiar enough with the interface to get to grips with it quite quickly.

Menus are well thought out – most of



PageStream is capable of creating very complex routines, though speed suffers at this level of detail

the options are where you'd expect them to be – and the floating toolbox is presented in clear and understandable icons.

In fact, the overall impression when using PageStream for the first time or, as in our case, after a long holiday from it, is of a program which does its best to be accommodating rather than demanding.

Don't let all this friendliness fool you into thinking PageStream is useless for serious DTP, as the reverse is the case. Everything from its support for the various graphics formats to its page layout tools and treatment of typefaces puts PageStream up there with the best of them.

Apart from the usual IFF and IFF24 graphics standards, PageStream will accept Adobe PhotoShop EPS (encapsulated PostScript) files, TIFF and PICT (complete with picture preview), IMG, MacPaint, Degas, GIF, PCX, Aegis Draw, and DR2D clips.

Text import supports most major American wordprocessors and just about any format of Ascii text you care to name, which can save a great deal of time going through a file to strip out unwanted carriage returns.

Text import

Page layout under PageStream 2.2 is aided by the more open-ended frameless approach and by several powerful features, not the least of which is the master page option.

By defining a master page, the user can set out page numbers, folios, margins, and guides for one page and have this repeated across every page in the document. With double-sided documents, a right and left master page can be created and the template applied automatically to odd and even numbered pages, releasing the user from the hassle of loading templates.

The only limitations to working with master pages are that any feature based on a master page can only be modified from the master.

This means, for example, that text columns should not be defined on the master page unless the user is content to have exactly the same size and number of columns throughout his or her document.

The upside is that any change made, say, to the format of the header or footer, is instantly carried over to every other page.

Importing text is made easier by the program's treatment of columns. Unlike the other two main packages, PageStream creates columns guides which are automatically treated as text boxes, complete with drag and resize tools.

This means flowing text into a page is a simple matter of creating columns using the menu option, clicking on the text tool, then selecting Import/Text.

The same easy-handed approach is taken to graphics importation. The user selects Import/Graphics, then chooses a picture using the standard file requester. There is then a choice of whether to import as an object or a picture window.

If the user chooses the object option, he or she can place and drag the graphic to the required size and location on-screen before releasing the mouse button to load the file.

The picture window option allows the loading of a file into a clipboard-style window from which areas of the graphic can be cut, pasted, and copied to the main document window. This is very useful when using clip art as there are often several clips in one large file.

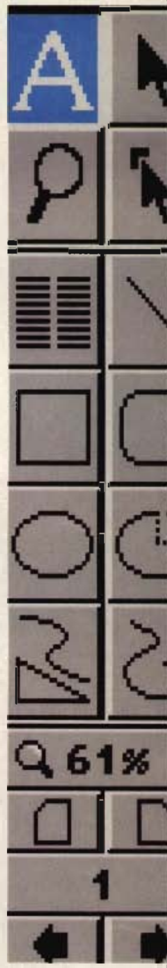
So much for the chuck-it-on-the-page functions. When it comes to fine tuning, PageStream is no slacker either. Point sizes for typefaces are scalable in steps of one hundredth of a point, the nine measuring systems include pica, didot, metric points, and ciceros, and colour is controllable through HSV, CMYK, HLS, or RGB values, though most professional users will settle for CMYK.

Page layout can be enhanced with the usual design features, such as boxes, ellipses, Bezier curves, and so on, and there are twelve text styles to choose from, including reverse (making WOBs a doddle), outline, strike through, shadow, backslant, and even mirror.

In addition, any page element can be rotated, slanted, and twisted using the excellent rotate requester to produce pseudo-perspective effects.

Text runaround, unique to PageStream, can be set to run around both sides of an irregularly shaped object (something even Quark Xpress can't do), and though this isn't always a useful feature for professional productions, its inclusion is an indicator of the quality and completeness of the PageStream package. There's virtually nothing you can think of that PageStream won't at least take a stab at.

Printing, especially to PostScript printers, has been greatly improved with v2.2. Tiling, scaling, thumbnails, mirror, negative, and a full set of crops and registration marks are all available through the print requester, and the Configure Printer option will allow close control of downloadable fonts to make the most of your Amiga's and printer's memory.



This most important feature of DTP, as well implemented as it now is, nicely rounds off a fully-featured and powerful package.

The main problem with PageStream is speed. Even on an A3000, screen update can be painfully slow when working close in on un-greeked text, and there's no feature to turn off screen refreshes such as that offered by ProPage.

In addition, the bleed area around your document is not properly pressed into service as a paste board.

PageStream will allow the user to put page elements in the bleed area when in full page view mode, but once zoomed in will not display anything which is off the page, making full use of the paste board impossible.

Stevie Kennedy



The Rotate function's slant and twist features make pseudo-perspective effcts possible

64 PAGE COLOUR CATALOGUE

YOURS FREE! WHEN YOU COMPLETE & RETURN THE COUPON BELOW

FREE! FROM SILICA



When you buy your new Amiga computer from Silica Systems, we will give you an additional £359.73 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of computing and help you to get off to a flying start with your new Amiga. Plus, with every Amiga from Silica we will give you 16 nights FREE holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Amiga 500 and 600 from Silica comes supplied with a free 72 page colour brochure with accommodation vouchers. These entitle 2 people to stay up to a total of 16 nights in any of 250 hotels with accommodation FREE. All you have to pay for are your meals (prices are listed in the brochure).

ARCADE ACTION PACK:

10 Superb entertainment titles:

ASTERIX	£24.99
CHESS PLAYER 2150	£24.95
DRIVIN' FORCE	£19.95
LIVE AND LET DIE	£19.99
ONSLAUGHT	£24.99
PIPE MANIA	£19.99
RICK DANGEROUS	£24.99
ROCK 'N' ROLL	£19.99
SKWEEK	£19.99
TRIVIAL PURSUIT	£19.95

PRODUCTIVITY:

PHOTON PAINT 2.0 The recommended paint package	£89.95
GFA BASIC V3.5 A power basic interpreter	£50.00
TOTAL VALUE:	£359.73

WORTH NEARLY £360!

Commodore AMIGA

LIMITED OFFER! STANDALONE MODEL





- 512K AMIGA 500 COMPUTER
- BUILT-IN 1Mb DRIVE
- A520 TV MODULATOR
- MOUSE CONTROLLER

PLUS! FREE FROM SILICA:

- PHOTON PAINT 2.0
- ARCADE ACTION GAMES PACK
- GFA BASIC INTERPRETER V3.5
- 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

£299

INC VAT & DELIVERY REF: AMC 0550

CARTOON CLASSICS

AMIGA 500+ INCLUDES NUMERIC KEYPAD



• 1Mb AMIGA 500 PLUS	£399.99
• BUILT-IN 1Mb DRIVE	FREE
• A520 TELEVISION MODULATOR	FREE
• THE SIMPSONS - BART v SPACE MUTANTS	£24.99
• CAPTAIN PLANET AND THE PLANETEERS	£25.99
• LEMMINGS	£25.99
• DELUXE PAINT III	£79.99
PLUS! - FREE FROM SILICA	
• PHOTON PAINT V2.0	£89.95
• ARCADE ACTION GAMES PACK	£219.78
• GFA BASIC INTERPRETER V3.5	£50.00
TOTAL PACK VALUE:	£916.68
LESS PACK SAVING:	£557.68
SILICA PRICE:	£359.00

PLUS! 16 NIGHTS FREE HOLIDAY HOTEL ACCOMMODATION

£359 Ref: AMC 0600

NEW! AMIGA 600

20Mb HARD DISK VERSION AVAILABLE



NEW COMPACT DESIGN

The A600 marks the new era of Amiga computers. More compact than the A500, the A600 has a built in 1Mb drive, TV Modulator, internal IDE hard drive interface to easily add a hard drive inside the Amiga, Smart card slot to accommodate ROM, RAM or game cards, easier to access mouse/joystick ports (on the side) and modified expansion slot underneath for additional RAM and battery backed clock.

• 1Mb AMIGA 600 (No Hard Disk)	£399.99
• DELUXE PAINT III (0Mb HD version only)	£79.99
• 'MYSTERY' GAME (0Mb HD version only)	VARIABLE
• 1 YEAR HOME SERVICE WARRANTY	
PLUS! - FREE FROM SILICA	
• PHOTON PAINT V2.0	£89.95
• ARCADE ACTION GAMES PACK	£219.78
• GFA BASIC INTERPRETER V3.5	£50.00
TOTAL PACK VALUE:	£839.71
LESS PACK SAVING:	£440.71
SILICA PRICE:	£399.00

PLUS! 16 NIGHTS FREE HOLIDAY ACCOMMODATION

NO HARD DISK - Ref: AMC 0666	20Mb HARD DISK - Ref: AMC 0720
£399	**£499**

NEW! CDTV DRIVE

AMIGA ADD-ON FOR A500 & A600



Commodore has released their new CDTV drives for the Amiga 500 and 600 computers. Simply plug the drive onto your Amiga and you have the power to:

- **USE THE SUCCESSFUL RANGE OF CDTV SOFTWARE.** A vast array of titles are available now and more are being released all the time. With the CD's ability to retrieve 540Mb of data (over 610 Amiga floppy disks!), it is the ideal media for software based around entertainment, music, education, reference and much more!
- **PLAY NORMAL AUDIO CDs.** The high quality CD Player (8 x over sampling) outputs sound quality that is equal to the best top end CD player available today. The CDTV drive gives you the ability to program the CD Player on-screen to select random play, pre-set play order and much more.
- **PLAY AND SEE CD+G CDs.** Not only do you get high quality audio but CD+G (Compact Disk + Graphics) produces graphics on screen while the track is playing. These graphics are usually based on the theme of the track or can be the lyrics of the song.

A570 CDTV Drive for A500 Kickstart 2.04	A570 for A500 Kickstart 1.3 Inc. Kickstart 2 upgrade	A670 CDTV Drive for A600 Kickstart 2.05
£299	**£349**	**£299**
REF: CCD 0570	REF: CCD 0583	REF: CCD 0677

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

SILICA SYSTEMS OFFER YOU

- *FREE OVERNIGHT DELIVERY:* On all hardware orders shipped in the UK mainland.
- *TECHNICAL SUPPORT HELPLINE:* Team of technical experts at your service.
- *PRICE MATCH:* We normally match competitors on a "Same product - Same price" basis.
- *ESTABLISHED 12 YEARS:* Proven track record in professional computer sales.
- *BUSINESS + EDUCATION + GOVERNMENT:* Volume discounts available **081-308 0888.**
- *SHOWROOMS:* Demonstration and training facilities at our London & Sidcup branches.
- *THE FULL STOCK RANGE:* All of your requirements from one supplier.
- *FREE CATALOGUES:* Will be mailed to you with offers and software/peripheral details.
- *PAYMENT:* By cash, cheque and all major credit cards.

Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE **081-309 1111**

SILICA SYSTEMS

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-309 1111**
Order Lines Open:	Mon-Sat 9.00am-6.00pm	No late Night Opening	Fax No: 081-308 0608
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA		**Tel: 071-580 4000**
Opening Hours:	Mon-Sat 9.30am-6.00pm	No late Night Opening	Fax No: 071-323 4737
LONDON SHOP:	Selfridges (1st Floor), Oxford Street, London, W1A 1AB		**Tel: 071-629 1234**
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm	Extension: 3914
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-302 8811**
Opening Hours:	Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm	Fax No: 081-309 0017

To: Silica Systems, Dept AMCDM-0792-80, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A 64 PAGE AMIGA COLOUR CATALOGUE

Mr/Mrs/Miss/Ms: .... Initials: .... Surname: ....

Address: ....

.... Postcode ....

Tel (Home): .... Tel (Work): ....

Company Name (if applicable): ....

Which computer(s), if any, do you own? 80

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

Jargon buster

Backslant The opposite of italics. Backslanted characters will lean to the left rather than the right.

Baseline The invisible line on which a line of text sits.

Baseline shift The distance of text from the baseline. Positive baseline shift gives you superscript text, and negative shift gives you subscript.

Clip art Any pre-drawn graphic imported for use in a DTP document. These can be IFF bitmaps, vector drawings, or PostScript files.

CMYK Cyan, Magenta, Yellow, and Key (black). A combination of these four colours will give any colour you like on paper. See the box-out on printing for a further explanation.

Crop To cut a graphic or printed page to a certain size.

Crop marks Hairlines printed along with your document to show the printers where to cut the finished page to size.

(EPS) Any bitmap or vector drawing image which has been defined and saved in the PostScript printing language.

Greeking This is used to speed up screen refreshes by representing text as a block of filled space or a series of backslash marks.

Guides Similar to the grid, but used mostly for margins and so on, guides are horizontal and vertical lines which are used by DTP operators for aligning page elements. Some packages will allow "snap to guides" to keep everything aligned perfectly. Like the grid, they will not appear on the printed page.

Gutter The space between columns of text on a page.

Halftone An image which is represented by different sized black dots to differentiate between light and dark shades. Halftones are used mostly by newspapers and other mono publications.

Jaggies The effect created by bitmap fonts and graphics, where the pixels show up the ragged edges of the image. Some outline fonts use bitmap screen representations which look slightly jaggie on-screen but which will appear perfectly smooth when printed.

Kerning The process of varying the amount of tracking between two character (such as AV) so that they fit tightly together, thus improving the final look of the document.

Leading Pronounced "ledding", this is the amount of space between any two baselines in a body of text. Leading can be expressed in different ways depending on the measuring system you use.
For example, 12 point text with 14 point leading will have a two-point gap between the top of the tallest letter and the next line up.

Mechanical separation Also called "spot colour". Most DTP packages allow the user to use mechanical separation for colours, such as fluorescent orange, which can't be separated into CMYK values. This is an expensive operation as it involves the production of an extra printing film for each spot colour.

Point Ditto. A point is 1/72 of an inch and is written 1pt. This is by far the most popular measuring system currently in use.

Routing The path through which text will flow across a number of columns. Most packages will allow this to be set automatically when columns are created, then adjusted by breaking the link between columns and creating new ones. In this way, text can be made to skip columns or entire pages.

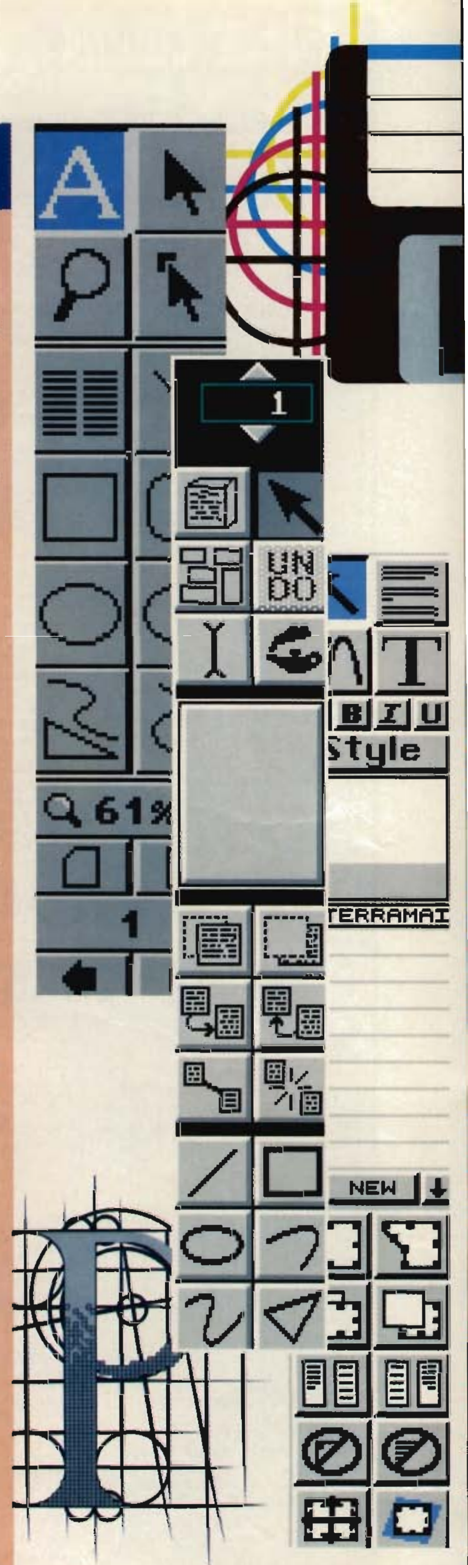
Serif A category of font which has "serifs" or small fancy bits at the end of straight lines on every letter (such as T and E). The opposite is "sans serif", fonts which look more modern and clinical. The text you are now reading is in a sans serif font.

Standoff The amount of space left around a graphic when text is flown around it.

Tags Style tags are short-cuts used to apply a text style, size, font, and many other attributes to a selection of text. The better DTP packages will usually allow the definition of a range of style tags, one each for headlines, captions and so on, which frees the user from the need to select all the text attributes each time a style is required. A collection of style tags is known as a style sheet.

Text runaround The process of forcing text to follow the outline of a box or other page element rather than just filling a column. The better packages will allow text to follow irregular outlines such as circles or drawings.

wysiwyg What You See Is What You Get. Any decent modern DTP package will offer a wysiwyg display, meaning that what you see on-screen is an accurate representation of what appears on paper.



Products

The products listed are available from:

Professional Page
HB Marketing
Tel: 0753 686 000
Price:£249.95

PageStream 2.2
Silica Systems
Tel:081-309 1111
Price:£199

Saxon Publisher 1.2
Surface UK
Tel:081-566 6677
Price:£249.99 (£149.99 with our special offer - see page 30)

CALLERS WELCOME AT OUR BRANCHES OPEN 9-5.30, MONDAY TO SATURDAY

PRICES SLASHED!!!
AMIGAS FROM ONLY £279

WANT MORE GAMES OR OTHER EXTRAS?
JUST ASK & WE GUARANTEE TO BEAT THE COMPETITION WITH THE BEST PACK AT THE BEST PRICE!

ST ALBANS NOW OPEN SUNDAYS
10.00AM - 4.30PM

Hobbyte
COMPUTING
ESTABLISHED 8 YEARS

10 MARKET PLACE ST. ALBANS
HERTS AL3 5DG TEL (0727) 56005/41396
THE GALLERY ARNDALE CENTRE LUTON,
BEDS LU1 2PG TEL (0582) 457195/411281

HOW TO USE THIS AD
For the first time ever, you can choose your own Amiga and software combination, and still benefit from the huge savings only available from package deals.
Want an A500 with 1500 software?
No problem!
Like an A1500 without games?
It's up to you!
All we ask is that you choose at least 1 software pack when you order your hardware (optional on CDTV A6000 or A3000)

AMIGA 500 1.3
Full UK spec., inc. mouse, power supply, all leads & manuals, etc.

	ALONE	WITH MONITOR
512K	279.00	478.00
1MB	299.00	498.00

AMIGA 3000
25MHZ, 100MB HD, 4MB Fast RAM, 2MB chip RAM
- SCALA • Deluxe Paint IV • Amigavision

ALONE	3289.00
WITH PHILIPS 7CM 3279	3539.00

AMIGA 600
1MB, WB 2.05, 3.5 FD + Smart Card Interface, with
- 12 month on-site warranty

A600 + DELUXE PAINT III + GAME	£364.95
A600 20MB HD (LARGER AVAILABLE)	£459.95

STARTER PACK I

	MAX VALUE/RRP
• 10 Blank Discs + 80 capacity lockable disc box	26.98
• Mouse Mat	4.99
• Virus Killer Disk	4.99
• DPaint III or Home Accounts	79.99
TOTAL VALUE	116.95
WITH AMIGA/CDTV	17.99
SEPARATELY	24.99

STARTER PACK II

	MAX VALUE/RRP
• Astra 10 games pack or 0.5MB RAM exp (1.3)	229.78
• G.F.A. Basic	50.00
• Photon Paint II or Back to the Future II (1.3)	89.95
• Holiday Accommodation*	
TOTAL VALUE	369.73
WITH AMIGA/CDTV	19.99
SEPARATELY	39.99

*While stocks last, entitles 2 people to stay up to 16 nights in over 250 hotels in Great Britain, S.Ireland and France. All you have to pay for is breakfast and dinner.

AMIGA 500 PLUS
Full UK spec., inc. mouse, power supply, leads & manuals, etc. inc. updated Agnus & Denise chips for better screen resolution to 1280x512, Kickstart & Workbench 2.04, expandable to 2MB CHIP memory & battery clock

	ALONE	WITH MONITOR
1MB	309.00	509.00
2MB	349.00	549.00

Zydec external drive with on/off & daisy chain port ADD 48.00
Also with Kickstart 1.3 + ROM Sharer for switching between 1.3/2.04 to eliminate compatibility problems ADD 47.99

CARTOON CLASSICS GAMES PACK EXTRA
(1MB REQUIRED)

	VALUE/RRP
• Cartoon Classics Games: Lemmings	25.99
The Simpsons	24.99
Captain Planet	25.99
• Deluxe Paint III with animation	79.99
• 3 Disc Home Pack including Word Processor, Spreadsheet, Database or PD Games compilation	9.99
TOTAL VALUE	161.96
WITH AMIGA/CDTV	15.99
SEPARATELY	29.99

1500 PACK EXTRA
(CAN BE USED WITH A500 1MB AND A500+)

	VALUE/RRP
• The Works Platinum, word processor, spreadsheet, database	169.95
• Deluxe Paint III with animation	79.99
• Get the most out of your Amiga book	9.95
• Hobbyte 50 Programme PD Greats Pack II	39.95
EITHER / OR	
• Sim City / • Puzznic	24.99
• Populous / • Toki	24.99
• Their Finest Hour / • Digital Home Accounts	29.99
• Battlechess / • Elf	29.99
• Microswitch Turbo Joystick	9.99
TOTAL VALUE	418.79
WITH AMIGA/CDTV	49.99
SEPARATELY	69.99

SPECIAL: Also with Cartoon Classics Games ADD 12.99

AMIGA 1500/2000
Full UK spec. with 1MB RAM, mouse, expansion as 2000, leads, manuals. New including Kickstart & Workbench 2.04.
Hard disc configuration inc. the high performance GVP II controller card, EXPANDABLE TO 8MB. Fast reliable 52MB +120MB Quantum Drives are used.

	ALONE	WITH 8833	WITH 7CM + FFIXER
Dual Drive	495.00	695.00	859.00
DD+GVP+20MB HD	699.00	899.00	1065.00
DD+GVP+52MB HD	765.00	969.00	1129.00
DD+GVP+120MB HD	908.00	1112.00	1272.00

Per extra 2MB fitted to GVP ADD 60.00
Also with Kickstart 1.3 + ROM Sharer ADD 47.99

CDTV
The ultimate CD interactive multi media machine with an Amiga inside!
- CDTV with CD ROM drive
- Lemmings CD
- Disc Caddy
- Hutchinsons Encyclopaedia CD
- Welcome CD + tutorial
- Remote control unit

AS ABOVE 439.99

ALSO: With keyboard and black matching disc drive to allow access to whole range of Amiga disc based software 549.00
SPECIAL: Also with up to £90 worth of CD titles of your choice! ADD 60.00

THE HOT LOT PACK
(1MB REQUIRED)

	VALUE/RRP
• Cartoon Classics Games: Lemmings	25.99
The Simpsons	24.99
Captain Planet	25.99
• Deluxe Paint III with animation	79.99
• 10 GREAT individually packaged games, previous RRPs up to 39.99 each, phone to choose from current list, or leave it to us! Children's games available.	269.82
• 50 Programme Hobbyte PD Great Packs II	39.99
• Dust Cover+ mouse mat	9.98
• 10 Blank Discs + 80 Capacity Disc Box	26.98
• Microswitch turbo joystick	9.99
TOTAL VALUE	513.72
WITH AMIGA	59.99
SEPARATELY	79.99

SPECIAL: ALSO 10 extra great games ADD 25.00

NO OTHER DEALER CAN BEAT OUR CREDENTIALS
- 8+ years experience in Commodore product and here to stay
- Commodore trained staff are friendly and helpful and are parents, multimedia, educational, games, programming or technical specialists (usually more than one!)
- Open 9-6 pm Monday to Saturday and 10.00 am to 4.30 pm Sundays for convenient shopping.
- Callers welcome for advice and demonstration at our 1600+ sq ft High St, Town Centre branches
- Next day delivery for most orders received by 5 pm; express 7 am-9 am and Saturday services available
- Hardware carefully handled and delivered safely and reliably by caged, insured, top name courier service
- 100% pre-despatch testing on Amigas
- Free 30 day, next day courier collection and delivery of NEW replacement.
- Hotline support and in-house engineers
- Extended warranty available on many products
- Upgrade and trade in offers to keep you up to date
- Exceptional after sales service

COMMODORE PREMIER DEALER
Hobbyte proudly announce this highest CBM accolade, awarded to only the top few dozen CBM dealers offering the best in expertise and support. All Amigas full UK versions.

WHAT THE CUSTOMERS SAY
..."extremely courteous and rapid response to my problem"..."I will not hesitate to recommend you to my colleagues."
Dr Darrel Maddy - Slough

"Thank you for dealing so promptly with my requests."..."I was reluctant about ordering my computer mail order. However I have been very pleased with my dealings with Hobbyte -you are to be commended for your customer service."
Trevor Patterson - Bangor

"We have dealt with many of the leading computer suppliers, in the past, but the service you provided was second to none.'
E W Bailey - Preston

..."Thank you for everyone's good service'...' it arrived at 7.20am the next morning."
David J Thomas - Wolverhampton

"I was very impressed with the service I received in the first instance, I really appreciated how quickly you managed to get the printer despatched from your Luton branch for me."
J S Cozadinos - Amersham

PROFESSIONAL FAMILY PACK
(1MB REQUIRED)

	VALUE/RRP
• Cartoon Classics Games: Lemmings	25.99
The Simpsons	24.99
Captain Planet	25.99
• Deluxe Paint III with animation	79.99
• The Works Platinum Word Processor, Spreadsheet and Database	169.99
• Their Finest Hour, Flight Simulator OR Back to the Future and Postman Pat (1.3 only) OR Digital Home Accounts or Edd the Duck	29.99
• Virus Killer Disk	4.99
• 50 Programme Hobbyte PD Greats Pack II	39.99
• Hobbyte Infant, Junior (specify) or Secondary Educational Pack	19.99
• 10 Blank Discs + 80 Capacity lockable disc box	26.98
• Mouse Mat + Dust Cover	9.98
• Turbo Microswitch Joystick	9.99
TOTAL VALUE	468.86
WITH AMIGA/CDTV	79.99
SEPARATELY	99.99

SPECIAL: Also with Star LC 200 9 PIN Colour Printer and Starter Pack ADD 185.00
Also with Citizen 224+24 Pin Colour Printer and Starter Pack ADD 245.00

COMMODORE PREMIER DEALER • STAR GOLD DEALER • CDTV CENTRE •

FAMOUS FIVE PACK
7-15 YEARS

VALUE/RRP

- Join Enid Blyton's Famous Five to solve the mystery of Treasure Island in this educational interactive adventure 24.99
- ADI - choose from any entertaining National Curriculum Maths or English course from Fun School publishers, OR any Fun School 25.99
- Target maths, suite of 4 fun programmes aimed at specific National Curriculum targets OR Maths Adventure: This adventure through time allows pupils to revise and check their progress in National Curriculum maths 25.99
- Sim City - Educational game award winner and Populous OR Elf - travel as Cornelius the Elf and Puzznic - addictive puzzle game 49.98
- Hobbyte Junior or Secondary Educational PD Pack, featuring up to 12 "Learn while you play" games 19.99
- Hobbyte 50 programme PD Greats II Pack 39.99
- Microswitch Turbo Joystick 9.99

TOTAL VALUE 196.92
WITH AMIGA/CDTV 59.99
SEPARATELY 79.99

SPECIAL: Also with 10 great individually packaged games RRPs up to £39.99, phone to choose from current list, or leave it to us! Children's games available
VALUE £269.82
ADD £34.99

ABSOLUTE BEGINNERS PACK 3-9 YEARS

VALUE/RRP

- Fun School 2, under 6 years, 6-8 years or 8+ years 19.99
- Fun School 3 or 4, specify under 5 years, 5 to 7 years or 7+ years.
- 12 stunning UK educational games with beautiful pictures, exciting animation and music that helps to develop number, word and other skills. Up to 6 skill levels. Conform to National Curriculum requirements. 24.99
- Postman Pat (1.3 only), OR Edd the Duck (7+ years) OR Matched Pairs OR Blinky's Scary School 14.99
- Hobbyte Infant or Junior (specify) Educational Pack, featuring up to 12 "Learn while you play" games 19.99
- Hobbyte 30 Easy Children's Games, 10 pack disc including Train Set and other top entertaining PD titles 19.99
- 10 Blank Discs 6.99
- Joystick 9.99
- Deluxe Paint II/Photon Paint II or Elf or Puzznic 89.99

TOTAL VALUE 206.92
WITH AMIGA/CDTV 49.99
SEPARATELY 69.99

SPECIAL: With Cartoon Classics Games and Dpaint III + animation instead of Dpaint II/Photon Paint II (1MB req.)
VALUE 80.00
ADD 14.99

TRAMPY'S OR THOMAS'S PACK
2-9 YEARS

AT LEAST 57 EDUCATIONAL/FUN FILLED GAMES!

MAX VALUE/RRP

- The Shoe People - 6 colourful and entertaining games featuring Trampy and friends to encourage early number reading and pre-reading skills. With Shoe People music 29.99
  OR Thomas the Tank Engine's Fun with Words - 6 separate easy to use learning programmes with animation and sound.
- Shapes and Colours - Bobby the Clown entertains and lays down the foundation for maths and writing in 6 colourful animated games. 9.99
- Fun School 2, 3 or 4 - the "Fun School" suite have won just about every award going. 5 or 6 wonderful animated games. 24.99
  OR Picture Book: 4 colourful and amusing games from ex 'Fun School' design manager will delight young children.
- Deluxe Paint II/Photon Paint II or Elf or Puzznic 89.99
- Hobbyte Infant Educational PD Pack, containing 10 fun while you learn games 19.99
- Hobbyte 30 Easy Children's Games Pack 19.99
- 10 Blank Discs, Disc Box, Joystick, Mouse Mat 26.96

TOTAL VALUE 221.90
WITH AMIGA/CDTV 49.99
SEPARATELY 69.99

SPECIAL: With Cartoon Classics Games and Dpaint III + animation instead of Dpaint II/Photon Paint II (1MB req.)
VALUE 80.00
ADD 14.99

GOLDILOCKS PACK
5-11 YEARS

MAX VALUE/RRP

- The Three Bears:- A colourful educational and entertaining adventure loosely based on the traditional story .(Improves reading skills and develops imaginative and logical thought) 22.95
- Money Matters - Four graphically brilliant and educationally sound games with coins keyboard overlay, top reviews 24.99
- Postman Pat (1.3 only), OR Edd the Duck (7+ years) OR Matched Pairs OR Blinky's Scary School 14.99
- Hobbyte Infant or Junior (specify) Educational Pack, featuring up to 12 "Learn while you play" games 19.99
- Hobbyte 30 Easy Children's Games, 10 pack disc including Train Set and other top entertaining PD titles 19.99
- 10 Blank Discs 6.99
- Microswitch Turbo Joystick 9.99
- Deluxe Paint II/Photon Paint II or Elf or Puzznic 89.99
- Mouse mat 4.99

TOTAL VALUE 214.87
WITH AMIGA/CDTV 49.99
SEPARATELY 69.99

AMOS PROGRAMMER'S PACK
(1MB REQ.)

VALUE/RRP

- EASY AMOS - complete, simplest possible, fun-to-use beginners programming course. Learn to write professional looking arcade games, educational, etc. software in weeks, not years. Complete with graphics, sound, animation and more. Upgradeable to Amos. 34.99
- Cartoon Classics Games: OR
  - Lemmings / Elf 25.99
  - Captain Planet / Puzznic 25.99
  - The Simpsons / Digita Home Accounts 24.99
- 50 Programme Hobbyte PD Greats Pack 39.99
- 20 Blank Discs + 80 Capacity LockableDisc Box 33.97
- Mouse Mat + Dust Cover 9.98
- 'Get the Most out of Your Amigo' book 9.95
- Microswitch Turbo Joystick 9.99

TOTAL VALUE 215.84
WITH AMIGA/CDTV 59.99
SEPARATELY 79.99

As above, but with:
- **Amos the Creator instead of Easy Amos**

WITH AMIGA/CDTV 69.99
SEPARATELY 89.99

NOTE: For both above packs, a second floppy or hard drive and a printer for listing are recommended, but not essential.

ARTISTS PACK

VALUE/RRP

- Deluxe Paint III with animation (upgradeable to DP IV) 79.99
- Power 400dpi scanner with Powerscan professional s/w 99.99
- 10 disc Hobbyte PD Graphics Pack inc. clip art + utilities 39.99
- Cartoon Classics Games: OR
  - Lemmings / Elf 25.99
  - Captain Planet / Puzznik 25.99
  - The Simpsons / Digita Home Accounts 24.99
- 50 Programme Hobbyte PD Greats Pack 39.99
- 20 Blank Discs + 80 Capacity LockableDisc Box 33.97
- Mouse Mat + Dust Cover 9.98
- 'Get the Most out of Your Amiga' book 9.95
- Microswitch Turbo Joystick 9.99

TOTAL VALUE 400.82
WITH AMIGA/CDTV 139.99
SEPARATELY 169.99

DTP PACK

ALL AS ARTIST'S PACK 400.82
PLUS: PAGESETTER II 99.99
TOTAL VALUE 499.81
WITH AMIGA/CDTV 189.99
SEPARATELY 219.99

OR: PRO PAGE 3 269.99
TOTAL VALUE 670.81
WITH AMIGA/CDTV 239.99
SEPARATELY 279.99

ACCESSORIES

Blitz virus protector + backup device for any external drive	23.99
A520 Modulator	26.99
A500 Deluxe control centre	44.99
Competition Pro Joystick	11.95
CDTV Keyboard	44.95

FLOPPY DRIVES

Zydec 3.5 external drive, daisychain + on/off	48.95
Cumana CAX 354 3.5 external drive, beige	52.99
CDTV external 3.5 drive, black,	59.99
PC 880B with anti click + Blitz back up and virus protector	67.95
PC 880B as above, Cyclone compatible	78.99
PC 880B with Blitz + X Copy	98.99
Dual drive as PC 880B	115.95

MONITORS/TVS/ACCESSORIES

CBM 1085SDI monitor + leads	216.99
Philips 8833 MK II monitor and leads	216.99
CBM 1960 High res monitor + Mway flicker fixer for 1500/2000	549.99
Tilt + swivel stand for Philips 8833	12.99
Philips 7CM3279 Hi-res SVGA .28dp for 3000 inc. tilt & swivel	259.99
As above, plus flicker fixer for A1500/2000	369.99

HARD DRIVES

A500 GVP 530 52 MB HD +68030 1MB exp. to 8MB	694.99
A500 GVP 530 120 MB HD +68030 1MB exp. to 8MB	844.95
A500 GVP 530 240 MB HD +68030 1MB exp. to 8MB	1038.95
A590 20MB HD	269.99
A500 GVPII 52MB HD, exp to 8MB	339.99
A500 GVPII 120MB HD, exp to 8MB	468.99
A1500/2000 GVP II controller, exp to 8MB + Quantum 52MB HD	264.99
A1500/2000 GVP II cont., exp to 8 MB + Quantum 120 MB HD	406.99
Per extra 2MB fitted to above	62.99

OLD AMIGA TRADE-IN

The best trade-in allowance, extra for peripherals and accessories. Trade in your old machine for a brand new A600/A1500/2000/3000, CDTV or even a PC.

SCANNERS

Naksha 400 dpi 32 greyscale + Datascan software	87.99
Power Hand Scanner, 400 dpi, 64 greyscale, Powerscan software	97.99
Power Colour Hand Scanner	235.95
Sharp JX100 A6 Scanner + scanlab software, supports 4096 cols, up to 18 bit	595.95
Sharp JX-300 A4 Scanner + s/w, up to 24 bit	POA

EXPANSION

A500 512K RAM exp + clock	21.99	CBM A501exp	29.00
1MB exp for A600	POA	A500 + 1MB upgrade	43.99
1.5 MB exp for A500	74.99	KS1.3 ROM Sharer	47.99

GVP A500 accel.-see Hard Drives

1.3 TO PLUS UPGRADE

Chip fitting and board upgrade available, by our qualified engineers or DIY kit .... POA

EMULATION

KCS Powerboard	188.99	AT Bridgeboard for1500	329.99
GVP 286 Emulator	227.99	386 SX B. board for 1500	429.99
AT Once	178.99	GVP 40/4 for 1500	945.99

DISCS

10 Blank DS/DD discs in box	6.99
50 Blank DS/DD discs	17.99
50 Blank DS/HD discs	27.99

SOTWARE

Games- tel for list	FROM 3.50
All latest games	30% OFF
All serious titles	25% OFF

NO DEPOSIT CREDIT FACILITIES

Credit terms at 34.8% APR (variable) can be arranged for purchases over £150, subject to status. Competitive leasing schemes are also available for businesses, including sole traders and partnerships. Just telephone for written details and application form.

PRINTERS

	ALONE	WITH STARTER PACK		ALONE	WITH STARTER PACK
Citizen 120+D	112.95	ADD £11.99	Citizen 224+col*	236.95	ADD £11.99
Star LC20	124.95		Citizen Swift 24e	246.95	
Star LC200 col	172.95		Citizen Swift 24e col*	266.95	
Citizen Swift 9	178.95		Star XB 24/200*	376.95	
Star LC 24-20	178.95		Star XB 24/250	456.95	
Star LC 24-200	216.95		HP Deskjet	346.95	
Star LC 24-200 col	256.95		HP Deskjet col	576.95	
Citizen 124D	176.95		HP Paintjet	526.95	
Citizen 224	211.95		BJ10e Bubblejet port.	226.95	

STARTER PACK: 500 Sheets A4 or continuous paper, Amiga to printer lead & Universal Printer Stand
* with new driver

ORDERING:
TELESALES NO: (0727) 56005

Next day delivery for credit card orders placed before 4.30pm subject to availability. Alternatively send cheque, postal order, bankers draft or official order (PLCs, Education and Government bodies only) to; Dept. AC, Hobbyte Computer Centre, 10 Market Place, St. Albans, Herts AL3 5DG. Please allow 7 working days for cheque clearance. Subject to availability, despatch is normally within 24 hours of receipt of cleared payment. Prices are correct at time of going to press, however, we are sometimes forced to change them, either up or down. Please check before ordering. Additional services and different packages may be offered in our showrooms, and prices may vary from Mail Order prices. Personal callers are asked to quote this ad to ensure Mail Order packages are offered.

DELIVERY CHARGES:	UK MAINLAND (NOT HIGHLANDS)
Small consumables & software items	Despatched by post, please check charges when ordering
Other items, except lasers	Next day courier service, £10 per box
Offshore and Highlands	Normal rate plus £20 + VAT per box

IN ADDITION WE OFFER THE FOLLOWING EXPRESS SERVICES:

Saturday deliveries	Normal rate plus £15 + VAT per box
7am to 9am next day	Normal rate plus £10 + VAT per box
Am next day	Normal rate plus £5 + VAT per box

Amiga prices, except where stated are inc. VAT. E.&O.E.

TELE-ORDER (0727) 56005

• PHILIPS APPOINTED DEALER • HP AUTHORISED DEALER • CITIZEN DEALER PLUS •

the DISK



Saxon Publisher 1.2

Amiga Computing presents an exclusive demonstration of the latest Amiga DTP package

If you've ever wondered whether it was worth your while buying an expensive DTP package when your wordprocessor would suffice, then been put off for good by the cost of finding out, now's your chance to peek into the world of one of the Amiga's most advanced application areas. Thanks to *Amiga Computing*, it won't cost you a penny.

The Saxon Publisher demo on your CoverDisk is identical to the full program with the exception that it will not save or print your work, so it forms an excellent introduction to the DTP world.

Version 1.2 of the program is the most recent release in the DTP war, and is packed with the sort of advanced features you would expect from a program costing £250.

Booting up

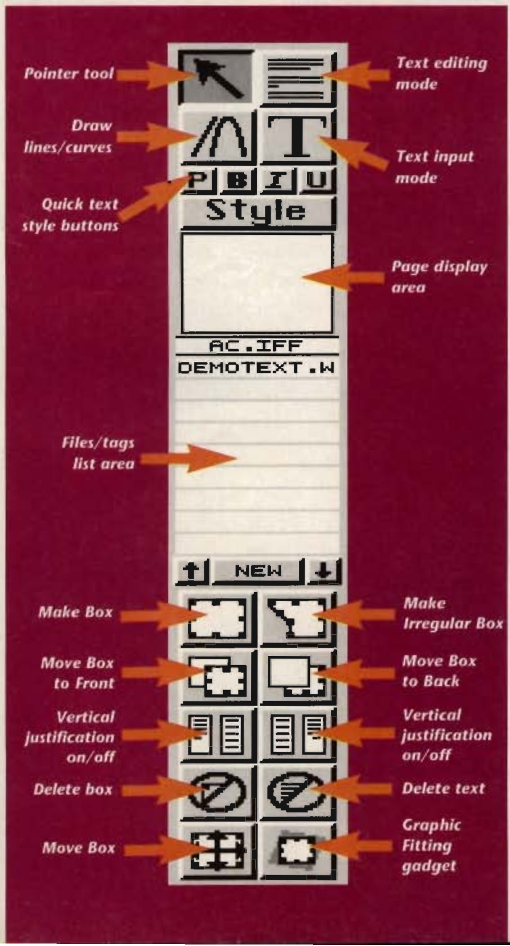
Start the demo by booting your CoverDisk, going into the Saxon Publisher drawer and clicking on the Version 1.2 icon, or selecting Saxon Demo from the ShortCut menus.

When the program has loaded, it will begin a rolling demo of Saxon's features, which you can halt by pressing the Escape key to return control of the program to the user.

It would be best to do so at once, as the demo is more suited to NTSC (Saxon Publisher is an American program) than PAL Amigas, and so doesn't work particularly well on European machines. As soon as Escape is pressed, the cursor will halt and you can begin to explore the package.

Our first job is to add a page to our document, so go to the Page menu and select Add. A requester will pop up in which you can choose the size of page to work on and define its background texture, but for our purposes simply clicking on OK to choose the default A4 size will do.

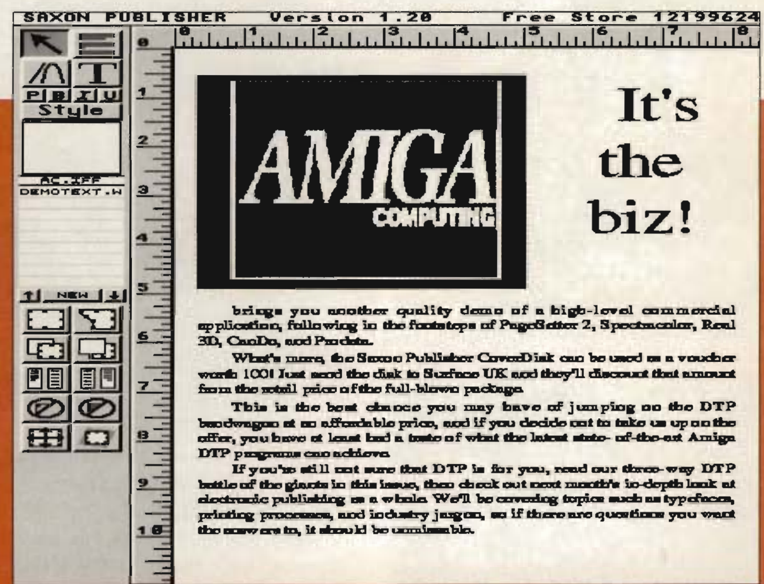
Your page, which for now is completely blank, will appear on-screen ready to be filled. At this point, we'll import the two elements which will go to make up the simple demo page, so hold down the right mouse button and select Graphic/Import IFF from the External menu.



When the file requester appears, click on Drives, then CoverDisk33, then SaxonPublisher_1.20, then DemoFiles - phew!

You should see two files, one called AC.iff, the other called DemoText.wp. Double click on the AC.iff file and after a bit of disk accessing its name will be tagged in the files list you should see halfway down the toolbox on the left-hand side of the screen. To import the text file, use the Import Text/Word Perfect option on the External menu.

To save time when the file requester pops up again, click on the History gadget and Saxon will display the directories you've recently used. The only one listed will be the DemoFiles directory, so click on this to go straight in, then double click on the DemoText.wp file. Again, this will be listed on the left of the screen.



When we've finished, the demo page should look something like this

Now to get these files on the page. Every "element" in Saxon documents is framed in a box in an attempt to make the structure of a page as easy as possible to control. Unlike most other DTP packages, however, Saxon will create any shape of box you please. For now, we'll stick to simple square ones.

Click on the box tool (top left tool below the files list) and a set of crosshairs will appear on-screen. Position these where you would like the box to start, click the mouse, move the crosshairs to where the box will end, and click gain to draw the box. Now repeat this operation to create a second box.

We need to resize these boxes so that the top one is about a third of the page high and just over half as wide, and the bottom one two-thirds of a page in height and almost as wide. Do this by clicking on the small sizing boxes along the edges of the active box.

The active box is the one you last cre- ➤



➤

ated or clicked on, so click on the top box and resize it, then click on the bottom box and do likewise. Once you have them at an acceptable size, click again on the top box to make it active and click on AC.iff in the files list. This will automatically import the graphic to the box.

You won't be able to see it at first, so select Graphics/Display Page from the Preferences menu and the screen will be redrawn. Once the IFF is visible, you can resize your box to fit it to the actual size of the image.

Now click on the lower box to make it active and the on DemoText.wp in the files list. The text will be imported in the default 12-point Times-Roman font and will not fill the box.

To change the type style, click on the text tool at the extreme top right of the toolbox (the one which looks like a page of text), then choose Alter Current from the Type Style menu.

A large requester will appear from which you can control the attributes of the text contained in the currently active box.

You will find a selector at the top for font type and size, but as the demo only has room for one font (Times-Roman) you can only choose to change the size. Do this now by clicking on the box containing the number 18, which will tell the program that our text is to be displayed as 18-point Times-Roman.

Click on OK to return to the document and notice the difference. Our demo text is much larger and should more than fill the box. Now click on the pointer tool (top left) and resize our box to make sure all the text is displayed in it – you can to go back to the previous requester and change type size to 15 point or so, but this isn't necessary.

If you are now happy with the text, our page should look fairly full, but the IFF will look a bit smaller than it should be. To change this, click on the top box to make it active, then select Alter Active from the Box menu.

Another large requester should appear using which it is possible to slant, rotate, and resize our box.

Look for now at the scale selectors towards the bottom of the requester. The available scale factors go from half to twice original size, but the string gadgets give you much closer control over scaling.

Click in these and type 1.5 for both X and Y scaling, then click OK. When the page redraws, our *AC* logo will be rather larger and probably won't fit in our box.

To reveal the rest of the image, drag out the box edges until all the IFF is showing. You should now have a reasonably tidy page, but as we have designed it more or less freehand, it won't be as accurately set out as it could be.

Laying out

To help in the layout of a page, Saxon offers several standard DTP features. The first of which you should use is the Grid option. Go to the Preferences menu and select Imposed Grid/Temporary Show. The page should be overlaid with a grid of small dots.

These dots indicate where the imaginary grid lines intersect each other, and they are the points to which the corners of boxes can be made to adhere in an technique usually called "snap to grid".

The default Saxon setting is that Snap to Grid is on, but even so you may not have lined up your boxes properly.

To try this out, with the grid points still showing, click on the box you want to move, then on the move tool, which is in the extreme lower left corner on the toolbox. The familiar set of crosshairs will appear on-screen, but this time they will be carrying a ghosted outline of your box. Now that the grid is visible it should be easy to place it exactly so that it lines up with the other box.

Notice that when you click to position your box, the grid disappears. This is because with all those points on-screen the update would slow down too much, so they are only displayed when needed.

The next page layout aid is the column guides feature. If you wanted to place our demo text, or any other text for that matter, in two or more columns, you'd need some sort of guide to keep your columns the same width and with the same gap between them (the gutter). To do this, select the Column Guides/Create option from the Page menu.

When the requester appears asking you how many columns you want, type 3 and click OK. A set of crosshairs similar to those used to create boxes will appear, but you must use these in a different way.

Position the crosshairs somewhere in the top left-hand corner of the page, then move to the bottom right of the page. When you click in the lower corner, hold down the mouse button and drag the crosshairs back across to the left.

As you go, you will see the box outline split into three, with an equal sized gutter between them. Click once more to set the column guides once you are happy with them.

Now you have to put boxes round the column outlines so that text can be flowed into them. To do this, it is best to switch off the grid or redefine it so that the points match the corners of the column outlines, so choose Imposed Grid/Define and either click the Off gadget or experiment with the grid setting until it matches the columns.

Now go back to the page and use the box tool to create boxes over the outlines you should already have made. You'll have to judge this as best you can, but with practice, especially once you've sussed out your grid settings, the process is a lot easier. Text routing, the process of forcing text to flow from one column or box to the nest, is easily accomplished in Saxon Publisher.

As long as you have two or more boxes defined, flowing the text in is a simple matter of clicking on the first box, then on the file name in the file list, then repeating the process for the remaining boxes.

Bare essentials

You have now had a quick guided tour of the bare essentials of DTP work with Saxon Publisher 1.2. The next step is to create your own page from scratch, and experiment with every feature of the requesters and menus we've used so far.

Try rotating the image we put in the top box, or using a larger text size and putting a headline on the page – try anything in fact.

The whole point of electronic DTP is that it not only makes life easier and quicker for the layout artist, it also makes experimentation a lot easier and offers a lot of flexibility to the eager twiddler.

If this brief intro has whetted your appetite at all, check out our DTP feature in this issue or take advantage of the £100 CoverDisk offer. You won't be sorry you did.

Get £100 off Saxon Publisher 1.2!

This month's CoverDisk is not only an ideal introduction to DTP, it is also a not-to-be-missed opportunity to take a first step into this exciting Amiga scene for less than you've ever had to pay.

Saxon Publisher 1.2's normal retail price is £249.99, but in a special offer organised with Saxon Industries and Surface UK, *Amiga Computing* readers need only send their original CoverDisk to Surface along with a cheque for £149.99, thus saving themselves £100.

Saxon Publisher is currently being shipped with a free copy of the powerful SaxonScript Professional PostScript interpreter (reviewed next month), so as a bargain bundle this one is hard to beat.

If you intend to take advantage of this opportunity, or require more information about Saxon Publisher, contact Surface UK at:

5 Rockware Avenue, Greenford
Middlesex , UB6 0AA

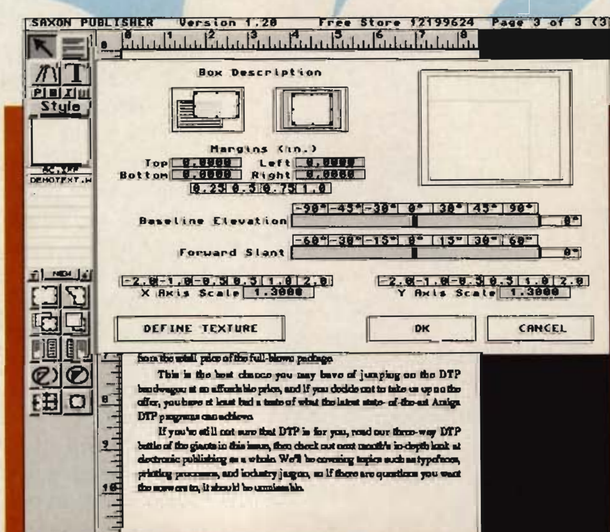
or phone them on 081-566 6677 (ext 106)

Faulty disk?

Subscribers — If you subscribe to *Amiga Computing* and your disk has been damaged in the post, please return it to: *Amiga CoverDisk, Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB*

Non-subscribers — If you bought your magazine from a shop and found that the CoverDisk was damaged, please return it within two months to: *Amiga CoverDisk, Stanley Precision, Unit F, Cavendish Courtyard, Sallow Road, Welldon North Industrial Estate, Corby NN17 1JX.*

Please allow 28 days for the delivery of your replacement disk.



The box attributes requester is useful if you need to scale, rotate, or add a texture to a box

You know what you want from your computer, that's why you're choosing AMIGA

...NOW YOU'VE CHOSEN THE RIGHT COMPUTER, MAKE SURE YOU CHOOSE
THE RIGHT DEALER

nyone can be good at selling Amiga or CDTV, but sadly, that's ten where it ends. So, when it's time to choose the best computer, s also time to find the best supplier. The one who is not only ways competitive, but the one who also gives you the best possible going support for you and your system.

ordon Harwood Computers, Pioneers of the 'Complete Pack' proach, have specialised in Commodore, from the earliest VIC 20, the latest Amiga, for almost a decade... In fact, we've supplied so any, if you ask all your friends, the chances are that some of them n tell you already of our excellent service.

ur service means that we'll help you get the most from your new stem straight away. But, if you do have problems, and need that tra hand, that's where we have earned our reputation.

you'd like all this, and more:

- FRIENDLY AND HELPFUL EXPERT ADVICE
- UNLIMITED ACCESS TO CALL IN SUPPORT AND EX-DIRECTORY TELEPHONE TECHNICAL HOTLINE
- ALL ADVERTISED PRICES FULLY VAT INCLUSIVE
- SHOWROOM DISPLAYS OF OUR EXTENSIVE RANGE OF HARDWARE, SOFTWARE AND PERIPHERALS
- EXPRESS COMPUTERISED MAIL ORDER, STOCK WARRANTY AND CUSTOMER SUPPORT SYSTEM
- COMPREHENSIVE INSTRUCTIONS WITH ALL SYSTEMS HARDWARE AND HELP BULLETINS WHERE REQUIRED
- FREE COLLECTION OF MAJOR HARDWARE ITEMS REQUIRING IN WARRANTY SERVICE
- NEW PRODUCT 30 DAY REPLACEMENT GUARANTEE
- EXPERIENCED AND TRAINED SERVICE TECHNICIANS
- AND OF COURSE, THE MOST COMPREHENSIVE RANGE OF REALLY COMPETITIVE PRODUCTS AND PACKS ANYWHERE!

GORDON
HARWOOD
HARWOOD
HARWOOD
Computers

The Closer you look,
The Better we look.

STOP PRESS...STOP PRESS...STOP PRESS...STOP PRESS

NEW 1Mb. AMIGA A600 RANGE AT FANTASTIC PRICES

As this issue of the magazine was going to press, Commodore announced these new models - due for release at the end of April 1992.

The details below are provisional, but rest assured the multi title Powerplay pack we are putting together around the 600 will include as usual, a superb value collection of high quality software and accessories. By the time you read this, our plans should be finalised.

PLEASE CONTACT US FOR UP TO THE MINUTE PACK INFORMATION AND AVAILABILITY.



TWO MODELS: A600 FD Single 3.5" 880Kb. Floppy Drive
A600 HD Single 3.5" 880Kb. Floppy Drive with internal 20Mb. Hard Disk Drive.

These two latest additions to the Amiga family introduce some stunning new features...

COMPACT DESIGN: With built-in modulator for smaller desktop footprint.
SMART CARD SLOT: For instant software loading and future expansion.*
COMPATIBLE: With virtually all Amiga A500+ software.
1Mb. RAM: Expandable to 2Mb. internally with Real Time Clock.*
IN HOME SERVICE: Means should a hardware fault develop, a technician will visit your home to service or replace your computer, normally within four working days...FREE!

INTERFACES: 2 Mouse/Joystick ports, Parallel Centronics, Serial RS232, External Floppy Drive, Direct RF TV Output, RGB Analogue, Composite Colour Video, Stereo Audio, Smart Card Slot, Memory Upgrade Port.

**It is important to note that the sidecar expansion bus & RAM expansion slot are different from those found on the original Amiga A500 and the current Amiga A500+ computers. Existing Amiga owners who have peripherals which connect in these ways who wish to upgrade computers, should consider whether the new A600 or its recently launched partner in the Amiga range, the A500+, is the most appropriate for their needs.*
Please contact us if you would like to discuss these technical matters in more detail.

A570 & A670 CD ROM DRIVES ▶▶

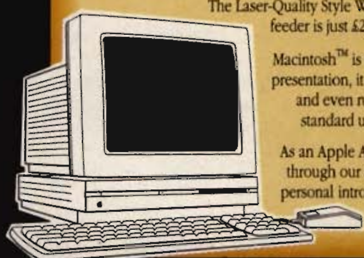
These fantastic CD ROM Drives will allow you to access the growing range of Interactive CDTV Titles for around £299* and also play your audio CD collection through your stereo! Simply plugs into your Amiga 500+ or A600 for immediate use. *[*RRP, compatibility and release details yet to be confirmed by Commodore UK* - Please telephone for further information]*



Apple™ in Alfreton...

For the professional user, Gordon Harwood provides the outstanding Apple™ Macintosh™ range of most user friendly yet powerful Personal Computers, at prices which compare favourably with Amigas.

Systems start at just £699.95 for a 40Mb. Drive Macintosh™ Classic™, with Monochrome Monitor and 4Mb. RAM. Colour systems are now available at a lower cost than the equivalent Amiga 1500 or 2000, but with much more useable power.



The Laser-Quality Style Writer™ Ink-Jet printer with automatic sheet feeder is just £299.95 to complete the whole package.

Macintosh™ is the industry standard system for DTP and presentation, it can also exchange files with MSDOS PC's and even run MSDOS programs [with SoftPC™, a standard utility package... available separately].

As an Apple Authorised Reseller, systems are available through our showroom only. Please visit us for your personal introduction to these exceptional computers.

Gordon Harwood Computers
Authorised Reseller

CARTOON CLASSICS MEGA 31* AMIGA A500 PLUS

New GORDON

31* MEGA GAME 1Mb

HARWOODS POWERPLAY PACK 1 COMES OF AGE WITH 31* GREAT GAMES & A 1Mb AMIGA A500 PLUS CARTOON CLASSICS WITH THE SIMPSONS, LEMMINGS AND CAPTAIN PLANET PLUS 28* EXTRA GAMES ONLY FROM HARWOODS!!!

ALL OUR AMIGAS ARE UNITED KINGDOM SPECIFICATION AND INCLUDE THE FOLLOWING...

1 Mb. Disk Drive
1Mb Ram Memory
TV Modulator
4096 Colours
Multi Tasking
Speech Synthesis
4 Channel Digital Stereo Sound
Amiga Mouse
Operation Manuals
Workbench 2 Disks
ALL Connecting Cables

PLUS...All OUR Amigas are backed by Harwoods Great Service

[Please see full details in our Ordering Made Easy' panel final page]



MEGA 31* AMIGA 1 PACK 1 POWERPLAY

THAT'S RIGHT HARWOODS HAVE PUT TOGETHER THE ULTIMATE AMIGA PACKS YET AGAIN... STARTING WITH POWERPLAY PACK 1 WHICH INCLUDES 31* GREAT GAMES!

Just look at what you get NOW...

- **AMIGA A500 PLUS COMPUTER WITH A FULL 1Mb. OF MEMORY!**
- **THE SIMPSONS, BART vs THE SPACE MUTANTS** - Thats right man! you can play the computer version of this popular TV cartoon. By Ocean.
- **CAPTAIN PLANET** - created from the award winning TV show, now's your chance to save the earths environment with this ultimate adventure... your Eco-Copter is waiting. By Mindscape.
- **LEMMINGS** - Are you as smart as Lemmings are stupid, match your intelligence against their lack of it as you play the 140 levels of the most original game of '91 (European Computer Leisure Awards Winner). By Psygnosis.
- **EDUCATIONAL BASIC LANGUAGE** FOR CREATING YOUR OWN PROGRAMS
- **DELUXE PAINT III** GRAPHICS PACKAGE WITH ANIMATION
- **TAILORED DUST COVER AND MOUSE MAT**
- **AND A SUPERB HIGH QUALITY MICROSWITCHED JOYSTICK,**
- **PLUS.... 18 MORE GREAT GAMES,** THERE'S SOMETHING FOR EVERYONE...

Our packs always contain Professional Games NOT PD or multi-game disk titles

BLOODWYCH - Fantasy role-playing game, great interaction with your computer created environment
BUBBLE+ - Help the dawdling ghost and the soap bubble, escape from the old deserted manor house
CAPTAIN BLOOD - Astonishing creatures and animated 3D graphics, this is a game you just have to play
ELIMINATOR - A progressive multi stage flying shoot 'em up, on a long winding course, survive if you can!
HOSTAGES - You must get your team and hostages out of the terrorist overrun embassy, without loss of life
JUMPING JACKSON - In a deluge of colour and sound save, the earth from sadness and melacholy music
KRYPTON EGG - A classic Breakout game, 60 screens, separated by 6 combat sequences
LANCASTER - Your mission is to fly the classic WWII bomber on its dangerous raids over enemy territiory
LOMBARD RAC RALLY - You drive your 300 bhp Sierra Cosworth through demanding stages of the rally
PURPLE SATURN DAY - Four arcade games, an exciting high speed trip into total cosmic 3D space
SAFARI GUNS - Live the African experience in an animal sanctuary, track the poachers & ivory traffickers
STIR CRAZY (Featuring Bobo) - Bobo & his inmates are planning a stunning trampoline jump prison escape
SKYCHASE - Airborne combat for every simulation fan. In this one or two player game, battle against your MIG flying adversary in your F-16 Falcon.
SKYFOX II - Skyfox II, the only ship fast enough to carry on the Skyfox legend. Fight to blow your federation enemies from the Galaxy, at speeds of 9000 kilometres/second!
STRIKE FORCE HARRIER - Puts you in the cockpit of one of Britains most exiting fighter aircraft. Multiple skill levels let you progress to become an ace pilot
TINTIN ON THE MOON - We've been captured by Colonel Jorgen and he's tring to scupper the moon mission. Come on Tintin, you're the only one who can save us, and be the first on the moon
TV SPORTS FOOTBALL - Strap on your helmet for American football simulation that looks like the real thing.
XENON 2 MEGABLAST - This time it's war! The Xenites are back and have thrown time itself into turmoil.

We reserve the right to substitute individual software titles or pack items should the need arise.

CARTOON CLASSICS MEGA 31* AMIGA A500 PLUS

BUY YOUR AMIGA WITH 2Mb FOR ONLY £40 EXTRA!!! (ie.1Mb RAM Expansion)

See Page 4 overleaf for details

*** OUR POWERPLAY PACK 1 PREVIOUSLY CONTAINED 21 GREAT GAMES BUT, NOW WE'RE INCLUDING THESE 10 FANTASTIC BONUS GAMES... ...BUT ONLY WHILST STOCKS LAST!**

DATASTORM - The fastest shoot 'em up of all time! Defender with a vengence!!!
DUNGEON QUEST - Ultimate in multisensory gaming! The BEST graphic mysteries!
E-MOTION- 50 levels of multi-coloured puzzles. A challenging emotional experience.
GRAND MONSTER SLAM - Elves, Trolls, Goblins, Orcs, Dragons & Knights do battle!
RVF HONDA - Formula 1 motorbike racing at 170mph on a Honda RC30 racing bike!
DRIVIN' FORCE - For driving maniacs! 12 competitions day or night with 6 vehicles!
PIPEMANIA - Classic puzzle arcade game. So addictive you won't want to put it down!
ROCK 'N' ROLL - Crazy action game accompanied by fantastic Rock 'n Roll sounds!
SKWEEK- Paint the town PINK, kill Schnoreuls and dominate 99 levels of Skweezland
TOWER OF BABEL - Intricate 3D strategy game. Fantastic lighting & shading effects!

...AND HARWOODS ALSO GIVE YOU A SUPERB BROCHURE OFFERING UP TO 16 NIGHTS FREE HOTEL ACCOMODATION IN AN EXTENSIVE SELECTION OF 400 HOTELS AROUND THE UK PLUS NOW A SPECIAL BUDGET FRANCE SUPPLEMENT IS INCLUDED TOO!

Priced at an INCREDIBLE

£399.95

Including VAT

HARWOOD POWERPLAY PACKS

All our packs contain the new Amiga A500 Plus. (1.3 Amigas may still be available to special order, please enquire.)

HARWOOD'S BRILLIANT 1Mb AMIGA 500 PLUS 'MEGA 31*' GAMES PACK 2

MEGA 31* — POWERPLAY — MONITOR PACK 2 — PACK TWO

That's right you get the fantastic Amiga & **ALL THE EXTRAS** detailed in Harwoods "Mega 31*" Pack 1 AND you also get...

THE PHILIPS CM8833/II STEREO COLOUR MONITOR

OR...YOU CAN CHOOSE A PHILIPS MONITOR TV AT NO EXTRA COST! See page 6 for FULL details of this remarkable Fast Text Monitor TV

A SPECIAL PACK FROM HARWOOD'S YOU SEE AND HEAR THOSE GAMES WITH SUPERB CLARITY

BUY AN AMIGA WITH 2Mb FOR ONLY £40 EXTRA!!! (ie. 1Mb RAM Expansion included)

Our monitor section on page 6 gives full details for your choice of Philips Monitors & Monitor TV's

£629.95 Including VAT

HARWOOD'S GREAT 1Mb AMIGA 500 PLUS 'MEGA 31*' PACK 3

MEGA 31* — POWERPLAY — MONITOR AND PRINTER PACK 3 — PACK THREE

That's right you get the fantastic Amiga & **ALL THE EXTRAS** detailed in Harwoods "Mega 31*" Games Pack 1 (far left) AND... then you also get...

THE SUPERB PHILIPS CM8833/II STEREOCOLOUR MONITOR

Our monitor section on page 6 gives full details for your choice of Philips Monitors & Monitor TV's

OR...YOU CAN CHOOSE A PHILIPS MONITOR TV AT NO EXTRA COST! See page 6 for FULL details of this remarkable Fast Text Monitor TV

Plus... **THE SUPER STAR LC 200 COLOUR PRINTER...**

Featuring... 185/40 cps, Full Colour 9 Pin NLQ Dot Matrix Printer with a FREE Dust Cover and cable to your Amiga. *(See printer panel for details)*

IF YOU WISH, REPLACE THE LC200 WITH A CITIZEN SWIFT 9 COLOUR AT NO EXTRA COST!!! OR... IF YOU PREFER A 24PIN COLOUR PRINTER, JUST CHOOSE FROM OUR RANGE & ADD THE DIFFERENCE IN PRICE BETWEEN STARS LC200 & 'YOUR CHOICE'. (eg. Citizen 224, add just £50)

£829.95 Including VAT

"IT'S THE-BUSINESS"

CARTOON CLASSICS — POWERPRO — POWERPRO PROFESSIONAL PACK

A TRULY PROFESSIONAL PACKAGE SPECIFICALLY FOR THE BUSINESS MINDED AMIGA USER. THIS ONE SHOULD FULFILL EVERY AREA OF HOME BUSINESS YOU'RE LIKELY TO NEED!

THE BUSINESS PACK FROM HARWOODS INCLUDES ALL THE FOLLOWING...

AMIGA 500 PLUS WITH 1Mb. MEMORY

+

PHILIPS CM 8833/II STEREO COLOUR MONITOR
See Monitor Panel on Page 6 for Details

OR...YOU CAN CHOOSE A PHILIPS MONITOR TV AT NO EXTRA COST! See page 6 for FULL details of this remarkable Fast Text Monitor TV

BUY AN AMIGA WITH 2Mb FOR ONLY £40 EXTRA!!! (ie. 1Mb RAM Expansion included)

+

STAR LC200 9 PIN NLQ FULL COLOUR PRINTER
See Printer Panel on Page 5 for Details

IF YOU WISH, REPLACE THE LC200 WITH A CITIZEN SWIFT 9 COLOUR AT NO EXTRA COST!!! OR... IF YOU PREFER A 24PIN COLOUR PRINTER, JUST CHOOSE FROM OUR RANGE & ADD THE DIFFERENCE IN PRICE BETWEEN STARS LC200 & 'YOUR CHOICE'. (eg. Citizen 224, add just £50)

+

A HOST OF BUSINESS SOFTWARE & ACCESSORIES...
PEN PAL V1.3 (Word Processor)...1Mb.
SUPERBASE II PERSONAL (Database)
SUPERPLAN (Spreadsheet)...1Mb.

+

A GREAT TEN GAMES PACKAGE
Datastorm, Drivin' Force, Pipe Mania, Dungeon Quest, Rock-N-Roll, E-Motion, Tower of Babel, Skweek, RVF Honda, and Grand Monster Slam.

Plus...

- THE SIMPSONS
- CAPTAIN PLANET
- LEMMINGS
- DELUXE PAINT III Now with ANIMATION
- MICROSWITCHED JOYSTICK
- 10 BLANK 3.5" DISKS
- DISK LIBRARY CASE
- MOUSE MAT
- 3 TAILORED DUST COVERS

ADD A CUMANA CAX 354 SECOND DRIVE FOR JUST £50 TO HELP RUN THOSE BUSINESS PACKS MORE EFFICIENTLY

WE MEAN BUSINESS AT A GREAT PACKAGE PRICE OF JUST...

£899.95 Including VAT

HARWOODS LEARN & PLAY

EDUCATION — LESSON A — EDUCATION A — PACK A

PRIMARY & JUNIOR PACK A

Get your children off to the right computing start with this software learn and play Compendium 6 pack...

KIDS TYPE, WEATHER WATCHER, CALENDAR QUIZ, WORDS & NUMBERS, GAME SET & MATCH, WHAT IS IT ?- WHERE IS IT?
Active, enquiring young minds will love the fun of these six entertaining but educational titles. Your children probably won't even realise that their "lessons" have begun!!!.

HOMEBASE
Ideal home storage system. Keep household lists, student records etc. Easy to use 'push button' controls.

PRIMARY MATHS COURSE
Around 24 modules in this course from 3 yrs old right up to secondary level. Follows N.C.

READING & WRITING COURSE
24 module course. Teaching from the computer and books. For early starters & the dyslexic.

A GREAT EDUCTIONAL PACK FOR YOUR CHILDREN AT A FRACTION OF THE NORMAL COST

£69.95 Including VAT

HARWOODS LEARN & PLAY

EDUCATION — LESSON B — EDUCATION B — PACK B

GCSE/'O' LEVEL PACK B

GCSE examination level studies on your Amiga computer that's fun!

MICRO ENGLISH, MICRO FRENCH AND MICRO MATHS
A set of three complete self-tuition courses to GCSE level which can also be used for revision work. All programs adhere to the National Curriculum and were designed and tested in schools by professional teachers. Micro French includes "real speech" to help your accent!

PEN PAL- Graphical Word Processor
A fantastic word processor with all the tools you'll need to create effective written work. Ideal for home work, projects etc. or for the families letters. Text wraps automatically around graphics, even as you type! Includes a built-in database and Forms Manager.

HOMEBASE
Homebase is the ideal information storage program for things like household lists, student notes, and children's educational projects. Inc. clearly labelled 'push button' controls and clear comprehensive reference manuals.

A GREAT EDUCTIONAL PACK FOR YOUR CHILDREN AT A FRACTION OF THE NORMAL COST

£89.95 Including VAT

VISA — ACCESS — SWITCH

Enquiries & Order Line: 0773 836781

Finance Facilities Available*
Please phone us for information and your personal application pack.

GORDON HARWOOD HARWOOD HARWOOD *Computers*

ALFRETON DERBYSHIRE

The Closer you look, The Better we look.

SOUND AND VISION
Words and Pictures
CDTV



IMAGINE, IF YOU CAN, THE CONCEPT OF A NEW, MORE POWERFUL AMIGA...

...WITH 1 MEGABYTE OF MEMORY, AND A COMPACT DISK DRIVE OF ALMOST INFINITE SIZE. A DISK DRIVE SO VAST, IT CAN STORE HUNDREDS OF MILLIONS OF DIGITS OF DATA. THIS DATA COULD BE, SPEECH, ANIMATED PICTURES, DIGITISED STEREO SOUND, COMPUTER IMAGES OR WHOLE ENCYCLOPAEDIAS.... AND MORE.

IMAGINE THIS, AND YOU CAN START TO GRASP THE CONCEPT OF CDTV.

THE INTEGRAL COMPACT DISK DRIVE, IS THE KEY TO THE POWER OF CDTV. ITS STORAGE CAPACITY IS EQUIVALENT TO AROUND A QUARTER OF A MILLION FULL PAGES OF TEXT. THIS WHEN INTEGRATED WITH THE 1 MB OF INTERNAL AMIGA CIRCUITRY, CREATES A SYSTEM, WHICH FROM A CD DISK, CAN GIVE YOU ACCESS TO AN UNIMAGINABLE SPECTRUM OF REAL WORLD IMAGES, NEVER SEEN COMBINED BEFORE. THESE VIVID IMAGES, WITH WORDS AND SOUNDS, GIVE YOU A WHOLE NEW DIMENSION IN HOME EDUCATION, ENTERTAINMENT & INFORMATION TECHNOLOGY. AND... DON'T FORGET, THAT CDTV CAN PLAY IN SUPERB QUALITY, ANY NORMAL AUDIO MUSIC CD, AND IT CAN ALSO PLAY THE NEW CD+G DISKS, WHICH GIVE DIGITAL SOUND AND ON SCREEN GRAPHICS.

ON CD DISKS NOW AVAILABLE, THERE ARE EDUCATIONAL PACKAGES, ENCYCLOPAEDIAS PACKED WITH REFERENCE INFORMATION, STUNNING GAMES, MUSIC SYSTEMS AND MANY OTHER NEW AND VARIED SUBJECTS, INCLUDING WHOLE WORLD ATLASES OR EVEN THE COMPLETE WORKS OF SHAKESPEARE, EACH ON ONE CD DISK!!! **CDTV - NOTHING LESS THAN REVOLUTIONARY**

FREE CDTV STARTER PACK!!!

WHEN YOU CHOOSE YOUR CDTV FROM GORDON HARWOOD, NOT ONLY DO YOU GET OUR LEGENDARY SERVICE, BUT WE GIVE YOU A CDTV STARTER PACK, TO GET YOU EXPLORING YOUR NEW WORLD - STRAIGHTAWAY. THIS INCLUDES A SUPERB SELECTION OF CD DISK TITLES INCLUDING THE WELCOME TUTORIAL & HUTCHINSONS ENCYCLOPAEDIA, PLUS ... FIVE GAMES, SHERLOCK HOLMES & THE HOUND OF THE BASKERVILLES, SIM CITY, CHAOS IN ANDROMEDA, A TOWN WITH NO NAME, AND THE ACCLAIMED LEMMINGS, WORTH IN TOTAL ALMOST £200.00. IN ADDITION IS THE INFRARED REMOTE CONTROLLER, AND ALL THE HARDWARE NEEDED TO GET YOU CONNECTED.

ALL THIS FOR JUST £499.95

CDTV IS THE SAME SIZE AND STYLE AS MOST VIDEO RECORDERS, SO IT CAN SIT UNOBTRUSIVELY ABOVE OR BELOW YOUR HOME TV AND/OR HI-FI. AND WITH ITS INFRARED REMOTE CONTROLLER, IT CAN BE OPERATED FROM YOUR ARMCHAIR. BUT PERHAPS MOST IMPORTANTLY, IF YOU ARE A COMPUTER ENTHUSIAST, REMEMBER THAT INSIDE EVERY CDTV, IS AN AMIGA, JUST WAITING TO BE USED. SO LATER ON, YOU'LL BE ABLE TO BUY THE OPTIONAL KEYBOARD AND DISK DRIVE, TO GET INTO THE WORLD OF AMIGA COMPUTING. PRINTERS, DIGITISERS, GENLOCKS AND OTHER ACCESSORIES,CAN ALL BE CONNECTED TO GIVE ACCESS TO MANY OTHER EXCITING FACILITIES, AND ALSO MANY OF THE EXISTING SOFTWARE PACKAGES AVAILABLE FOR THE AMIGA COMPUTER. NEVER BEFORE HAS THERE BEEN SO MUCH POTENTIAL FROM ONE NEW STUNNING SYSTEM, PACKED WITH **TODAYS TECHNOLOGY.!**

CALL IN AND SEE US FOR YOUR PERSONAL DEMONSTRATION, OR PHONE US FOR YOUR FREE DETAILED CDTV INFORMATION PACK.

CDTV ACCESSORIES

Please call for latest availability.

CD 1220 KEYBOARD	AN 89 KEY QWERTY KEYBOARD	£49.95
CD 1252 MOUSE	INFRARED MOUSE WITH BATTERY SAVER.	£49.95
CD 1200 TRACKBALL	INFRARED TRACKBALL, WITH THE OPTION OF DIRECT CONNECTION TO EXTEND BATTERY LIFE. DUPLICATES FUNCTIONS OF 2 BUTTON MOUSE & INCLUDES TWO 9 PIN PORTS FOR STD. JOYSTICKS	£79.95
CD 1400 CADDY	FOR HOLDING CD WITHIN DRIVE	£9.95
CD 1401 MEMORY CARD	PERSONAL RAM CARD CONTAINING 64K OF MEMORY FOR STORING DATA OR AS A BOOKMARK FACILITY WITHIN CDTV	£79.95
CD 1405 MEMORY CARD	A LARGER PERSONAL RAM CARD CONTAINING 512K OF MEMORY FOR STORING DATA OR AS A BOOKMARK FACILITY WITHIN CDTV	£249.95
CBM FLOPPY DRIVE	3.5" FLOPPY DRIVE WITH 880K CAPACITY. MATCHING BLACK FINISH . SUPPLIED WITH AMIGA WORKBENCH DISKS/MANUALS etc.	£99.95
CD 1301 GENLOCK	PAL BASED VIDEO INTERFACE CARD FOR SUPERIMPOSING CDTV IMAGES OVER A VIDEO SIGNAL PROVIDED BY ANY STANDARD VIDEO SOURCE	£149.95
ROCLITE 3.5" DRIVE	CDTV COMPATIBLE AND STYLED IN MATCHING BLACK.	£69.95

Many Amiga Accessories & Peripherals (e.g. Printers, Disk Drives, Software etc.) are compatible with CDTV. Please phone us for compatability information.

HARWOODS AMIGA
PRO-GEN
NEW LOWER PRICE



PROFESSIONAL QUALITY GENLOCK FOR COMPUTER AND VIDEO MIXING, AT A DOWN TO EARTH PRICE!!!

Please note the above photograph shows Spectracolor which has now been replaced by Photon Paint 2.0

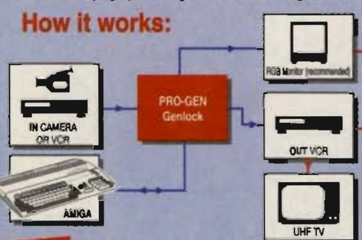
PRO-GEN Amiga Genlock

The Pro-gen AMIGA Genlock allows you to mix your Amiga display with any PAL video signal whether it is from a VCR, Laserdisk player or a Camcorder. In fact any item of video equipment which outputs a PAL composite video signal.Combined with the Amiga computer the Pro-Gen gives you the facilities of a special effects & video titling suite. Take your own films & give them a professional look by OVERLAYING TITLES or by SUPER IMPOSING YOUR OWN GRAPHICS created in packages like Photon Paint 2.0 or Deluxe Paint. Pro-Gen is supplied with micro illusions superb Photon Paint 2.0 package.

FREE Photon Paint 2.0 Software

A powerful Lo-and-Hi resolution hold and modify (HAM) paint program, with overscan (NTSC/PAL) and special effects for your Amiga Computer including all the following... **Contour Mapping:** drapes a brush over a 3D "landscape". Pixel intensity values decide the peaks and valleys, while a specially developed ray-tracing algorithm maps the image precisely. **Surface Mapping:** around 3D objects, both geometric and free hand drawn. **Luminance:** sets the light source and intensity. **Shadowing:** automatically with control of size and offset. **Brush Control:** twist, tilt, resize, flip, rotate, bend, adjustable transparency, stretch etc etc. PLUS LOTS MORE! A great program allowing use of 4096 colours. Choice of horiz/vert page print, negatives, anti-aliasing, dithered print, adjustable brihgtness etc.

How it works:



STOP PRESS

PRO-GEN... NOW INCLUDES A VERY VERSATILE MULTI COMPONENT VIDEO TO GENLOCK CONNECTING CABLE KIT. THIS ALLOWS PRO-GEN TO BE USED STRAIGHTAWAY WITH MOST POPULAR VIDEO EQUIPMENT, WITHOUT THE NEED TO HUNT DOWN THE CORRECT CONNECTING CABLES. THIS KIT CAN ALSO BE USED TO CONNECT IN OTHER WAYS... eg. VCR TO VCR etc.
A KIT TO START YOU OFF RIGHT FROM THE MOMENT YOU OPEN THE BOX!!!

NEW LOWER PRICE

PRO-GEN with Photon Paint 2.0 ONLY £99.95

Mode Switch-box for Genlocks

Features Include
- Compatible With The Pro-Gen And Rendale 8802
- Supplied With Genlock Extender Cable Worth £9.95
- Switch-box Switches Between Foreground, Background, Video And Computer Modes.

£29.95

*Finance terms are available (subject to status) for most products, please see our ordering panel at the end of this advert for full details

AMIGA DRIVES & MEMORY

Cumana CAX354 3.5" External 2nd Disk Drive.

- Features Include
- Long connecting cable
- 1Mb, (880K Formatted) Capacity
- Enable/Disable Switch,
- Throughport
- Access Light
- Compatible with Amiga500/1000 1500/2000/3000 and CDTV

NOW SUPPLIED WITH A FREE 3.5" Disk Head Cleaner to maintain your new drive in 'tip-top' condition.

£57.95



GVP 52-420Mb HARD DISK DRIVES WITH MEMORY EXPANSIONS OF UP TO 8Mb.

- Capacities of 52 to420Mb
- Connects to sidecar bus on L/H side of A500/A500 Plus
- Autoboots with Kickstart 1.3/2.0, boot enable/disable switch
- Sockets for up to 8 Mb of RAM
- SCSI Port allows up to 7 other devices to be connected
- Supplied with easy to use software
- 2 Year Warranty ☆ Dedicated PSU
- Mini slot for future expansion
- PC-AT Emulator planned to be available for 1992

GVP AMIGA A500 HARD DRIVES

RAM SIZE	CAPACITY 52Mb.	120Mb.	240Mb.
0Mb.	£349.95	£519.95	£729.95
2Mb.	£419.95	£589.95	£799.95
4Mb.	£489.95	£659.95	£869.95
8Mb.	£629.95	£799.95	£999.95

GVP AMIGA 1500/2000 HARD DRIVES

RAM SIZE	CAPACITY 52Mb.	120Mb.	240Mb.	420Mb.
0Mb.	£289.95	£409.95	£639.95	£1169.95
2Mb.	£359.95	£479.95	£709.95	£1239.95
4Mb.	£429.95	£549.95	£779.95	£1309.95
8Mb.	£559.95	£679.95	£899.95	£1429.95

CALL FOR MEMORY UPGRADE PRICES IF YOU ALREADY ARE A GVP OWNER!

EDUCATION SOFTWARE

DON'T JUST PLAY GAMES WHEN YOU CAN LEARN WITH YOUR AMIGA TOO!

MICRO MATHS - 24 easy to use programs for GCSE ('O' Level) revision or self tuition £18.95

MEGA MATHS - A 9 level step by step tuition course. For mature beginners, 'A' Level studies & Micro Maths users £20.95

MICRO FRENCH - GCSE French tuition or revision course. Covers both spoken & written French £18.95

MICRO ENGLISH - Complete self-tuition programe to GCSE level. £18.95

PRIMARY MATHS - Ages 3 to 12, Complete 24 Prog. Course. £18.95

SPELL BOOK - Ages 4 to 6, Developed with the help of a Primary School Head Teacher to aid spelling skills. £17.95

HOMEBASE - Home storage prog., ideal for those household lists, childrens educational projects, student notes etc. Easy to use "Push Button" controls and a extensive reference manual. £19.95

COMPENDIUM SIX PACK- 6 Great Educational Progs. for children aged 4-12years of age. Each is designed to keep your childs interest whilst they learn. **KIDS TYPE** - Large characters & colurful graphics helps creation of stories. **WEATHER WATCHER** - Collect & analyse data using graphs etc. even animate your own weather map! **CALENDAR QUIZ** - Quiz based learning of time related events. **WORDS AND NUMBERS** - Put words & scentences in the correct order or group numbers. **GAME, SET & MATCH** - Early learning of shapes colours, numbers, coins, sequences and including a "reaction timer". **WHAT IS IT? WHERE IS IT?** - Learn names & locations of British counties. £29.95

HARWOODS AMIGA 1Mb PRO-RAM PLUS

ADD MORE POWER TO YOUR AMIGA 500 PLUS WITH A FULL 1Mb. MEMORY UPGRADE!!!

- 1Mb. RAM expansion for the Amiga 500 Plus
- Gives a total of 2Mb. of RAM
- Easily fitted without any dismantling in the trapdoor expansion slot underneath Amiga. DOESN'T invalidate your warranty!
- Low power consumption ☆ 2 Yr Guarantee!

A GREAT NEW OFFER FROM HARWOODS

Only... **£44.95**

0.5 Mb PRO-RAM

- Compatible with Amiga A500 and 500 Plus
- Gives A500 a total of 1Mb Memory + Clock
- Gives 500 Plus a total of 1.5Mb Memory

Only... **£29.95**

AMIGA SOFTWARE

Music-X: The ultimate software for professional MIDI sequencing. The software includes a configurable librarian and a synthesiser patch editor. All you need to recreate a song can be recalled from one performance file including sequences, MIDI routing, sync setup, keyboard maps & synthesiser or drum machine patch libraries. NEW LOW PRICES - £49.95 or just £69.95 with midi-interface!

MIDI INTERFACE (5 Port): In, Out, Through plus 2 switchable thru'/out. inc. 2 cables. £24.95

AMOS: AMOS allows you to access the power of the Amiga with ease. 500 different commands make AMOS a sophisticated development language. The AMOS animation language allows you to create complex animation sequences. 300 page manual and over 80 example programs £49.95

Amos Add on Modules: (BOTH require Amos prog.)
Amos Compiler £29.95 Amos 3D £34.95

BUY ALL THREE AMOS PROGRAMS FOR JUST **£89.95**

SuperBase 4: Most powerful database available for the Amiga.Combines the ease of use of SuperBase 2 with a versatile programming language so that you can tailor your data to your own specific needs for club/business/library records etc. £229.95

Lattice C: An ideal tool for the C programmer whether experienced or a novice. The best way to create applications for the Amiga.Fully supports Motorola chipset. Nearly 300 functions optimised to help the user write the tightest possible code. Includes screen editor. Most Amiga C books are based around lattice. (Requires either 2 floppy drives OR a hard disk drive) £199.95

Deluxe Paint IV: Latest version of the Amigas first, and still the best, paint and animation package, now including HAM mode. (1 Mb. minimum memory or more recommended) £79.95

Vidi, The Complete Colour Solution: Vidi with RGB Splitter, Frame Grabber & Digitiser. Grabs moving colour video into 16 grey scale frames (up to 16 frames in 1Mb. Amiga) and digitises from still colour video source in up to 4096 colours in less than 1 second! Requires home VCR or video camera for grabbing. Requires video camera or VCR with perfect pause for digitising. Now comes with Photon Paint 2.0 ABSOLUTELY FREE OF CHARGE!!! £149.95

STEREOMASTER: High quality "stereo" sampler (best for sampling instruments etc.) £39.95

Pen Pal V.1.3

WORD PROCESSOR/DATABASE

With Pen Pal you can mix text, 4096 colour graphics & data in ways no other w/p can! "It's handling of graphics is unsurpassed: Pen Pal is the only word processor I tested that will automatically wrap text round graphics.. **Amiga World, July '90**



£79.95

PEN PAL complete WITH 512K Amiga RAM Expansion only...£99.95!

THE ABOVE IS JUST A SMALL SAMPLE FROM OUR EXTENSIVE RANGE OF THOUSANDS OF SERIOUS, EDUCATION AND RECREATION TITLES.WE CAN'T LIST THEM ALL HERE SO PLEASE CALL US IF YOU CAN'T SEE THE PROGRAM YOU REQUIRE, IT'S PROBABLY IN STOCK!

All our packs contain the new Amiga A500 Plus. (1.3 Amigas may still be available to special order, please enquire.)

Enquiries & Order Line: **0773 836781**

Finance Facilities Available*
Please phone us for information and your personal application pack.

GORDON HARWOOD Computers

ALFRETON DERBYSHIRE

The Closer you look, The Better we look.

NOW INCLUDING TEN FREE GAMES PACK TOTALLY FREE!

INCLUDES FREE...FREE... F19 STEALTH FIGHTER

MONITORS & MONITOR TV's

Harwoods stock a complete range of both Monitors & Monitor TV's to give you your perfect solution to the type of display to buy.



PHILIPS CM8833/II
Stereo High Resolution Colour Monitor

The ever popular 14-inch Philips CM 8833 MkII. Its versatility means you not only get excellent colour graphics & text performance with a wide range of personal computers, but when connected to a VCR , you get an amazing 600 pixel TV picture.With the 8833 MkII, Harwoods give you the complete set up, to get you going straight away... Monitor, RGB picture and Stereo Audio Cables, Tailored dust cover, and a full 12 Months on site service warranty.

☆RGB/AD, TTL, Composite. Video & stereo audio inputs ☆Can be used as a TV with VCR or Tuner ☆Also as a Video Camera display monitor ☆Retractable stand ☆Twin Stereo Speakers ☆Headphone Jack Socket ☆FREElead for your computer ☆FREE 12 Month on site service warranty.

THE MOST VERSATILE STEREO COLOUR MONITOR AVAILABLE

£249.95

CBM 1084S STEREO COLOUR MONITOR.

Commodore's Own Stereo High Resolution Colour Monitor with... ☆RGB/AI/TTL, Composite. Video/Audio Inputs ☆Can be used as TV with VCR or tuner. ☆Twin Speakers for stereo output ☆Supplied with cables for A500, CGA PC,\C16-64-128.

£269.95

It's important to remember that most TV Monitors, are still first and foremost televisions, meaning that their average 400 pixel tube display 50% lower resolution than a monitor) cannot be guaranteed to display 80 column text clearly without risking eye strain. If choosing a Television Monitor ensure it has the latest 2000 character tube capability, meaning it can handle the Amigas' 80 characters, by 25 line output clearly.

NEW!!! PHILIPS 15" FASTEXT TELETEXT REMOTE CONTROL 60 CHANNEL MONITOR TV.

BRAND NEW SUPERB DEFINITION PHILIPS MONITOR TV. IDEAL FOR AMIGA OR CDTV USERS, GIVING FOR THE FIRST TIME TRUE MONITOR QUALITY FROM A FULL FEATURE TELETEXT TV AT AN AFFORDABLE PRICE!!!. JUST LOOK AT THE FEATURES... ☆Direct Scart Connector for Amiga, CDTV, VCR OR SATELLITE RECEIVER ☆RGB/AD, Composite Video & audio inputs ☆FULL TELETEXT FACILITIES (FOR THIS FACILITY EXTERNAL AERIAL SHOULD BE USED) ☆Headphone Jack Socket ☆FULL TWO YEAR GUARANTEE ☆2000 CHARACTER HIGH DEFINITION FST TUBE ☆SUPPLIED WITH LOOP AERIAL ☆REMOTE CONTROL ☆FREE lead for YOUR computer *(IF YOU WOULD LIKE THE MONITOR TV IN OUR PACKS 2, 3, AND POWERPRO, AT NO EXTRA COST, TO REPLACE THE 8833/II, SIMPLY ADVISE US AT THE TIME OF ORDERING)*

ONLY... **£259.95**

10 FREE GAMES WITH YOUR TV OR MONITOR WHEN PURCHASED SEPARATELY (ie. These games are already included within Harwoods Amiga Packs 2, 3, & Powerpro...see details on pages 1 & 2 of this advertisement!!!)

AMIGA ACCESSORIES

KCS POWERBOARD IBM PC EMULATOR ☆Allows you to run many popular IBM PC compatible software titles on your Amiga or Amiga A500 Plus ☆Hercules, CGA & Monochrome Video Support,☆Supports Both 3.5 Inch & 5.25 Inch Diskettes ☆Fits Into A501 RAM Slot, 8088 XT Processor, ☆Clock/Calendar Included, ☆Acts As 512K RAM Exp. When In Amiga Mode, ☆Includes MS-DOS 4.01, Shell & GW-BASIC, DOS-Help, & On-Board Memory ☆Supports A590 Hard Drive, Mouse Driver Software Included. WHEN ORDERING PLEASE SPECIFY WHETHER YOUR AMIGA IS A 1.3 OR PLUS VERSION. — **£219.95**

KCS POWERBOARD AS ABOVE BUT WITHOUT: MS-Dos 4.01, GW-Basic, Shell, — **£189.95**

POWER MONO SCANNER COMPLETE WITH POWER SCAN SOFTWARE — **£99.95**
100dpi TO 400dpi. Supports up to 64 grey shades. Throughport for printer etc.
Supplied with Power Scan software, allows full screen image editing, interlace mode on or off, edit true grey scale and even colour images.

SUPRARAM RX 500 (2Mb. to 8Mb. RAM Expansion)
The RAM expansion giving massive memory WITHOUT dismantling your Amiga, thus avoiding the possibility of invalidating your warranty. Easily connects to sidecar with bus 'pass-through' for HD's etc.
2Mb. RAM Version £199.95 **4Mb. RAM Version** £329.95
8Mb. RAM Version £549.95



NAKSHA MICROSWITCHED MOUSE £24.95
HIGH QUALITY OPTICAL MOUSE £32.95
COMPETITION PRO JOYSTICK 5000 Black £7.95
ZIPSTICK JOYSTICK £12.95
COMPETITION PRO STAR JOYSTICK £14.95
The ONLY joystick to obtain a 100% rating from a magazine review!
3.5" DISK HEAD CLEANER £2.99
BLANK DISKS with labels
10 Genuine SONY 3.5" branded Only £9.95
50 Genuine SONY 3.5" branded Only £39.95
10 Unbranded with library case 3.5" certified Only £7.95
200 Unbranded 3.5" certified Only £84.95

MIRACLE PIANO TEACHING SYSTEM - Music Keyboard to connect to your Amiga — **£299.95**
Miracle is the first Piano to teach you how to play it. Whether you want help finding Middle C, or want to learn how to play Mozart, Miracles stunning Amiga Software and Midi Keyboard turns learning into FUN. Study Classical, Rock and even Jazz.
- 128 Built in Sounds
- Full sized Touch Sensitive keyboard keys
- Stereo Sound
- Get even more from your Amiga
- Miracle even gives you a recording studio
- Versions for other computers available too, please ask for details

POSSO STORAGE BOXES £19.95
150 piece stackable 3.5" disk storage boxes
BANX STORAGE BOXES £11.95
80 piece lockable 3.5" disk storage boxes

MANY MANY MORE ACCESSORIES TOO NUMEROUS TO LIST ARE ALWAYS AVAILABLE FROM GORDON HARWOODS. If it's not listed just phone us and ask!!!

Easy Ordering

Before you choose from whom to purchase, please phone us. We are always happy to discuss your requirements, and answer any queries you may have...

ORDER BY PHONE: Phone our Order Hotline with your Access, Visa, Mastercard, Switch or Lombard Creditcharge Card quoting number & expiry date (Dixons, Currys, NASCR and other 'store' cards are Lombard Creditcharge and are accepted by us).

ORDER BY POST: Make cheques, bankers building society drafts or postal orders payable to GORDON HARWOOD COMPUTERS. (Personal/business cheques take 7days to clear from day of receipt whereupon your order will be despatched). Please send Name, Address, and most importantly if possible, a Daytime Telephone Number along with your order requirements. Please check you are ordering from one of our latest advertisements before posting (phone if you require confirmation). Please remember that for example many September publications appear during August, therefore prices you see may have changed (either up or down).

FREE POSTAL DELIVERY: FREE within 14 working days, UK Mainland only, OR: COURIER SERVICE Add £5.95 per major item for next working day delivery, UK Mainland most regions.

EXPORT ORDERS: Most items are available at TAX FREE PRICES to non UK residents when visiting /export shipment. Please contact us for ordering information.

REMEMBER AFTER YOU'VE BOUGHT FROM HARWOODS, WE'LL STILL BE HERE...

TECHNICAL SUPPORT: You will be given our Exclusive Technical Support Phone Number to call should you require any help or advice on any aspect of the system you have purchased.
12 MONTH WARRANTY: Items proving faulty within 30 days of purchase are replaced with NEW UNITS unless otherwise stated. For the whole guarantee period, warranty service will be completely FREE OF CHARGE.
COLLECTION FACILITY: Any computer, monitor or printer requiring warranty service can be collected from your home FREE OF CHARGE during the guarantee period (UK Mainland only) and a FAST turnaround is GUARANTEED by our OWN ENGINEERS!
FULL TESTING PROCEDURE: All computers are tested prior to despatch, and all items are supplied with mains plug and leads as required - just connect up and use straight away.

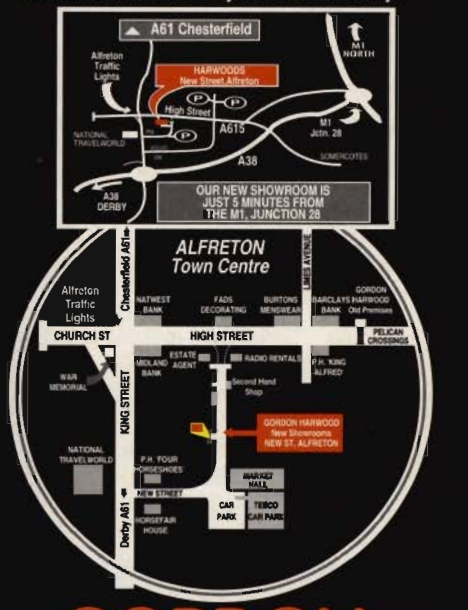
REMEMBER WE'RE NOT JUST ANOTHER MAIL ORDER COMPANY...

All listed prices are what YOU PAY, and there are NO HIDDEN EXTRAS. VAT and postage are included, and prices are correct at time of going to press (Pack details may vary from time to time). Offers are subject to availability and to being the latest advertised packs and prices. Our offers are NOT supplied on a trial basis. E&OE.

FINANCE FACILITIES... tailored to suit your needs. Written details on request. Gordon Harwood Computers offer facilities to purchase using our budget account scheme. APR 36.8% (Variable). Available to most adults of eighteen years or over, subject to status. Simply phone or write and we will send you written details along with an application form. Applications, required in advance, available to full time U.K. mainland residents and overseas British forces personnel. Showroom visitors, please ask for details of our in-store "Instant Account". Written quotations on request.
If you are already the holder of a Lombard Credit Charge Card you can use this to purchase from us (subject to your personal card limit)

VISIT OUR SPACIOUS SHOWROOM:
Please pay us a visit where our full range of advertised products, at the SAME COMPETITIVE PRICES, & MORE, is on sale. 'ALL UNDER ONE ROOF', in pleasant surroundings at our purpose built showroom *(See note below map)*. There's plenty of FREE parking close by.

OPENING TIMES 9.00 until 5.00 Monday to Saturday
9.00 until 1.00 Wednesday. Closed on Sundays



GORDON HARWOOD HARWOOD HARWOOD Computers

Access · Creditcharge · VISA · SWITCH

GORDON HARWOOD COMPUTERS
DEPARTMENT AMC/G4, NEW STREET,
ALFRETON, DERBYSHIRE. DE5 7BP
TEL: 0773 836781 FAX: 0773 831040

Cute beyond

Stevie Kennedy takes a long, simpering look at Commodore's newest and tidiest Amiga, the A600

The Amiga family has grown somewhat over the past couple of years, seeing the introduction of a disguised A2000 in the shape of the A1500, the high-end powerhorse A3000, and finally the A500 Plus at the end of last year.

All have extended or improved the Amiga product range in a clear and logical fashion which pundits and punters alike have been able to come to terms with.

The latest Amiga, however, has arrived amid a great deal of confusion, leading to a lot of market speculation on the machine's role and position in the family.

The problem is that the A600 could be any one of three machines. It is either a replacement for the A500/A500 Plus, a straightforward addition to the range, or the first in a new line of Amigas.

The first possibility has been thoroughly trashed by Commodore, who vehemently deny rumours that the A500 is living on borrowed time. As long as one believes what Commodore say, then, the A600 cannot be viewed as a replacement for the most popular Amiga of all.

Sultry

Treated as a straight addition to the range, the A600 assumes a decidedly cuckoo-ish air. It is incompatible with the vast majority of third-party peripherals, offers no more memory or basic power than an A500 Plus, and sells for the same amount.

However, as the 20Mb hard drive version will be price cut by most retailers to around £470, the A600-HD offers far greater value for money than an equivalent A500 system, so how can it fit in when it undercuts the existing mainstay of Amiga sales?

The third option – a new line of Amigas, heralded by the arrival of the A600 – is the one which causes Commodore employees to become suspiciously cagey. See this month's news column for an *Amiga Computing* exclusive on the next Amigas on the launch pad.

Putting aside the market view of the A600, it has to be admitted that the machine shines on its own merits. It is the smallest, most compact and undoubtably the cutest Amiga ever released, and in its 20Mb hard drive version could cause a revolution at the lower end of the Amiga market.

The existing paths to hard drive ownership are strewn with the burned-out shells of wallets gasping at the spontaneous combustion of wads of tenners. In short, hard drives are more expensive than they need be, and this has restricted the Amiga's use as a low-cost serious tool.

With the imminent release of the A600-HD, that situation is set to change. Prospective owners now have the choice of going straight to a hard drive machine for £499, and more likely significantly less as the retailers begin to slash RRPs, making the equivalent A500 Plus setup redundant – it would set you back over £600.

The A600's external appearance has often been compared to the Commodore 64, though it is in fact more akin to the old Oric Atmos.

The numeric keypad has gone, resulting in dimensions of 34 x 24cm as opposed to the A500's 47 x 34cm, and the machine has an attractive wedge-like look to it. In fact, once the design started to sink in, I was reduced to walking up to the A600 at regular intervals for a quick cuddle. It's just toooo cute.

Inside, Commodore have really rung the changes. Every chip save the Kickstart chip is mounted directly onto the motherboard, following Commodore's avowed intention to use surface mount technology (SMT) on all Amigas, and most components have been shrunk in size.

The result is a clean compact layout with little room for expansion but even less for breakdowns.

Commodore are so confident in the reliability of SMT design that every A60 will be shipped with on-site maintenan thrown in. This means that if a machi dies for some reason, the user need on call the Commodore national repair ce tre to have an engineer dispatched on mercy mission.

The response time stipulated Commodore is four days, a great de faster than present repair times.

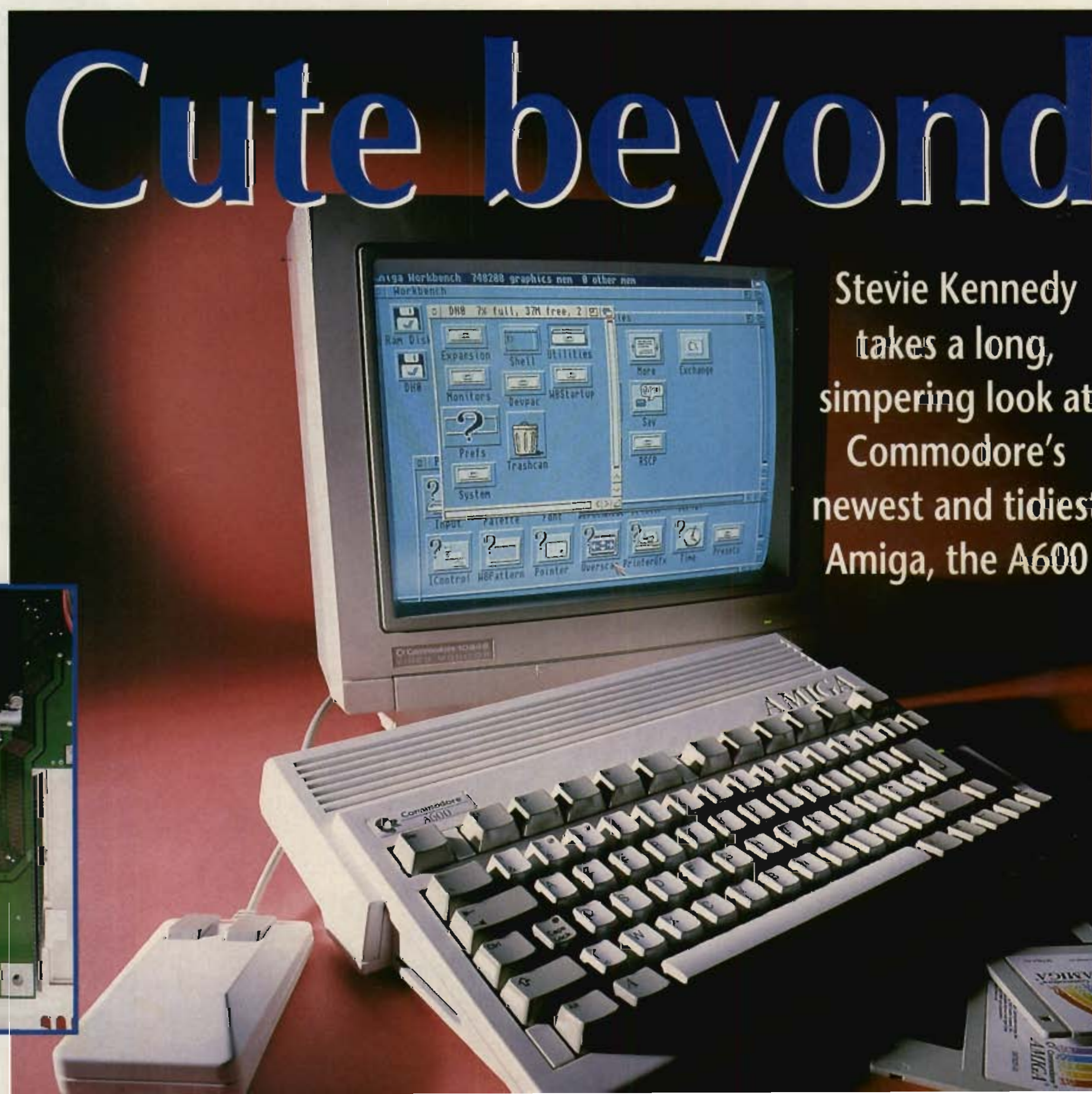
Serious faults will still result in t return of an Amiga to base for radic surgery, but the old problems of ke board lock-up and floppy drive failu should be fixable in your own front roor

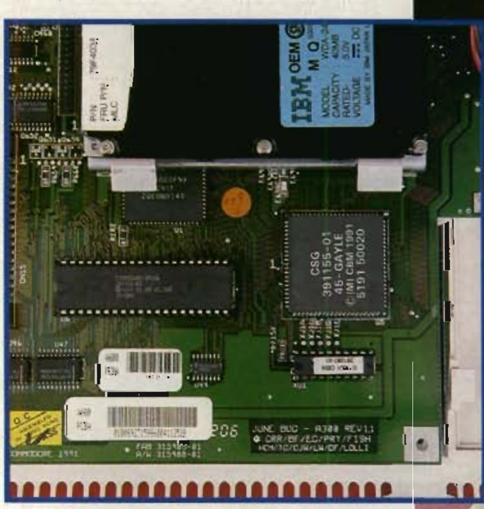
Software compatibility

Just about all software which is compatible with the A500 Plus will run on th A600. The only programs which will have difficulty will be those which depend o the numeric keypad, which is non-existent on the new machine.

Some games – mostly flight sims – will suffer because of this, and the odd DT or spreadsheet package user will find certain keyboard shortcuts are no longe available, but on the whole the problem is not a major one.

One other potential problem is that the combination of Kickstart 2.04 and hard drive will result in the usable memory on boot-up being restricted to aroun 700k. This means that games which require 1Mb on A500's will not load from th hard drive unless a RAM expansion has been fitted.





Markings on the motherboard clearly show the A600's origin as the A300 – as reported exclusively in AC several months ago

The new keyboard design should help considerably in this respect, as it is now built in to the upper casing and attached to the motherboard via a much more tenacious connector than of old.

The internal floppy could be a bit of a problem, as it is secured with a single bolt and tends to sit on its own ribbon cable at a rakish angle. Given the cramped wedge design, this is unavoidable, but I would have liked to have seen a more solid mounting for the component which takes the most pounding at its owner's hands.

Mounting

What astonished me most when I pried the top off our A600 was the hard drive mounting. The internal hard drives used in all A600s (including the 40Mb version we had supplied by Power Computing) are extremely light, thanks to their origins in the weight-conscious portables market, and smaller than the average cigarette packet.

They are, however, still hard drives, and need to be mounted securely. At first sight, the A600 mounting seems inadequate, as the hard drive sits on a saddle supported only by four legs loosely inserted through holes in the motherboard and a protruding arm designed to press against the inside of the upper casing.

In practice, however, the whole concoction is pretty safe, as after several minutes of thorough shaking it continued to auto-boot without problem.

The rear of the machine is fairly standard. All main external device ports are arranged in a similar fashion to the A500, with the addition of an RF port from the built-in TV modulator, and the mouse and joystick ports have found their way (at last) to a more sensible placing on the right-hand side of the casing.

My only niggle is with the placing of the video port, which is more centrally located than it used to be. The narrow casing means your A600 doesn't overlap any monitor which may be sitting behind it, so the monitor cable will have to run below the monitor, unless you put a fairly tight bend into it.

This aside, the layout is quite neat and the more accessible mouse/joystick ports are sure to be popular with those who switch to the A600 from other Amigas.

The built-in modulator will delight anyone who has struggled with the hideous A520 modulator used on the A500.

The keyboard has the same typing action as the A500 keyboard, and the designers have been inspired enough to keep the cursor cluster in its traditional inverted "T" formation, unlike the dreadful Macintosh Classic keyboard, which makes cursor control a nightmarish experience.

For the moment, most models floating around are German imports with German keyboards, but the British models should be no different.

The machine's performance is identical in most respects to the A500 Plus in terms of speed, but the A600 begins to trounce the A500 Plus when purchased in its hard drive configuration.

A built-in IDE hard drive interface coupled with – at first – 20Mb hard drive, gives the first time user more storage space and functionality than any other low-end Amiga owner has ever enjoyed.

Our review machine was fitted with a 40Mb IBM hard drive, a fairly standard piece of equipment which should be pretty close to Commodore's 20Mb version. In tests, data transfer was rated at about 443k per second – a rather average performance – but not slow enough to restrict serious use and still vastly superior to any floppy.

The A600-HD's most pleasurable advantage will be its capacity to hold one's favourite wordprocessor, database, spreadsheet, and a few games (Microprose Golf would be my own first installation task) in one compact little box that can fit in a briefcase, schoolbag, or rucksack.

The built-in TV modulator will mean the only obstacle to completely luggable Amiga computing will be the power supply. This has been retained in its ludicrous "brick" casing, a decision I find remarkable from a company whose TV ads will purportedly concentrate on the A600's portability.

Smaller

We can only hope that a third-party manufacturer can produce a much smaller, more transportable power supply.

Although launched in the middle of the summer quiet period, the A600-HD is likely to be a huge success with enthusiasts and should steal the bulk of the hobbyist market this Christmas.

Pure games players may settle for the A500 Plus, which could see even more vicious price cutting as a result of the A600 launch, but with sales of the new machine hopefully stimulating software houses to produce more hard drive-installable games, this could be a shortsighted decision.

Hardware compatibility

From the pre-launch information we've been supplying over the past couple of months, most of our readers will be aware that the A600 has a completely redesigned trapdoor slot and no DMA port.

This raises the spectre of hardware incompatibility and, unlike in the case of the A500 Plus software scare, I can only confirm your worst fears.

No existing Amiga trapdoor peripheral will be compatible with the A600 unless some sort of adaptor can be devised, and as there is no DMA port (the large slot you find on the A500's left hand-side), no existing slot-in hard drive or digitiser will work either.

Happily, this should be less of a problem than it would have been on the A500 as the new machine accepts internal hard drives and has a 4Mb capacity memory card slot on its left-hand side.

Any attempt to accelerate the A600, however, seems doomed to failure. Surface technology means that the usual piggy-back style A500 accelerator cards will not fit, and neither will any other piggy backer, such as Avideo or the ICD flicker fixer, both of which fit in the old Denise socket.

The light at the end of the hardware tunnel seems to be the 40-pin trapdoor edge connector, which is suspiciously well-endowed with connections to be a simple memory card slot.

If DMA access is possible through the trapdoor, and Commodore have not yet released enough technical information for us to judge this, though it seems likely, you can rest assured that third-party manufacturers will find a way to shove more and more into even this supposedly unexpandable Amiga.

compare



A non-standard 40-way edge connector in the trapdoor means partial compatibility problems for the A600

The new Gayle chip replaces Gary and takes care of the RAM slot

The new 4Mb "credit card" RAM slot, which should see further development by Commodore and third-party manufacturers

Joystick and mouse ports are now easier to get to

Hard drives are available from 20Mb to 120Mb storage, though only third-party companies are at present offering the higher specifications

Positioning of the video port makes monitor use a bit tricky

The built-in TV modulator makes portable Amiga computing a viable proposition

The A600 is a product of Commodore-Amiga Inc.
Tel: 0628 770088
Price: £399 or £499 with 20Mb internal hard drive
Launched: end of May
Supplier of test machine: Power Computing (0234 843388)

RICOH PCL5 LASER PRINTER

Ricoh UK Ltd is part of the worldwide Ricoh Group of companies, originally established in Japan, in 1936. With a turnover of over $5 billion and 37,000 plus employees, Ricoh has been producing computers and peripherals since 1971. They are renowned in the industry as pioneers in the field of Office Automation Equipment and have won many awards for outstanding industrial design. Ricoh have employed all their expertise to produce a 'first' in laser printers for the worldwide market, the LP1200 with FLASH ROM.

Fully HP LaserJet III™ compatible, the new LP1200 laser printer employs industry proven laser technology. Unlike LED page printers, which use light emitting diodes, the LP1200's laser lightsource, focussed by high quality lenses, is able to produce the most accurate and intense printed images. It has 2Mb of RAM built-in and requires no additional RAM to print a full A4 page of graphics. Its fast, efficient processor and engine, together with straight paper path design, allows printing at a full 6 pages per minute. Unlike its competitors, this advanced laser engine enables the LP1200 to address a range of print resolutions up to 400dpi. A printer driver is scheduled for release in late May, to enable the Ricoh LP1200 to print at 400dpi from Windows 3.

Again, unlike the competition, the LP1200 includes a powerful document description language as standard. This language, 'LAYOUT', offers unique opportunities to develop custom-made printing systems. In particular, forms and document templates can be designed and stored electronically in the LP1200's unique FLASH ROM, alleviating the need for pre-printed forms!



FLASH ROM UPGRADABLE!

400dpi 2Mb RAM 6PPM

FULLY HP LASERJET III™ COMPATIBLE

Silica Systems are pleased to introduce the revolutionary, new Ricoh LP1200. It has all of the specifications that you would expect to see in today's most technically advanced laser printer, plus a unique additional feature which places it far ahead of the competition - FLASH ROM. This 'Future Proof' technology protects the investment you make when you buy a Ricoh LP1200, as it enables you to keep up to date with new laser firmware developments. FLASH ROM is an area of memory inside the LP1200 which holds the printer's controller instruction firmware. If new firmware is developed, updated printer command languages etc, can be downloaded into this memory. Other manufacturers would require you to buy a new printer! Fonts, macros, additional emulations and graphics can also be stored in FLASH ROM, or on removable FLASH ROM IC cards. The new Ricoh LP1200 is the only laser printer to offer this FLASH ROM facility.

- ***6 PAGES PER MINUTE***
  Using a straight paper path design
- ***PCL5 - SCALABLE FONTS***
  Latest PCL version, includes HP-GL/2
- ***SHARP EDGED PRINTING***
  Ricoh FIAL (Fine Image ALgorithm) enhances resolution
- ***400dpi RESOLUTION***
  Default resolution - 300dpi. Will address 200, 240 and 400dpi.
- ***2Mb RAM AS STANDARD***
  Allows printing of a full A4 page of graphics at 300dpi
- ***UNIQUE FLASH ROM***
  For controller software upgrade and storage
- ***IC CARD SLOT***
  For programmable FLASH ROM cards
- ***EXPANSION BOARD SLOT***
  For improved connectivity to additional systems eg. PC-LAN, FAX etc
- ***LAYOUT***
  Document Description Language
- ***SERIAL + PARALLEL PORTS***
  For connection to PC compatibles and other computers
- ***1 YEAR ON-SITE WARRANTY***
  8 hour response

The Ricoh LP1200 is a genuine laser printer and not an LED printer. Make sure you check out the competition!

See how the Ricoh LP1200 compares to its Laser Printer Competitors

FEATURES	EPSON EPL4100	HP LASERJET IIIP	MANNESMAN TALLY MT904+	RICOH LP1200
Average Street Price (*expected)	£569	£699	£699*	£699
Official RRP	£945	£1,179	£1,099	£1,195
Maximum resolution in dots per inch	300x300	300x300	300x300	400x400
Windows 3 Driver @ 400 dpi (May)	-	-	-	YES
Print Speed	6ppm	4ppm	4ppm	6ppm
Straight Paper Path	YES	-	-	YES
PCL 5 Printer Command Language	-	YES	YES	YES
HP-GL/2 Vector Graphics included	-	YES	YES	YES
Resolution Improvement/Enhancement	YES	YES	YES	YES
Full A4/300 dpi graphics with standard RAM	-	-	-	YES
Warm Up Time	<45 secs	<60 secs	60 secs	45 secs
First Page of Text Output	<20 secs	<40 secs	34 secs	<15 secs
Document Description Language included	-	-	-	YES
Flash ROM	-	-	-	YES
Upgradable Firmware	-	-	-	YES
IC Card Slot	YES	-	-	YES
Scalable Resident Fonts - in HP LJ III Emulation	-	8	8	8
Resident Bit-Mapped Fonts	11	14	14	14
AGFA Intellifont Scalable Font Technology	-	YES	-	YES
HP LaserJet III Emulation Included	-	YES	YES	YES
EPSON FX Emulation Included	YES	-	YES	YES
IBM ProPrinter Emulation Included	-	-	YES	YES
Standard Tray Capacity	100	70	100	100
Protective cover on standard tray	YES	-	YES	YES
Cost per copy*	1.65p	2.00p	1.71p	1.65p
Min-Max Paper Weight in gsm	60-157	60-105	60-120	60-157
Able to print on OHP Film	YES	YES	YES	YES
Able to print on card (157gsm - Manual Feed)	YES	-	-	YES
Auto Sensing on Parallel and Serial ports	YES	-	-	YES
Standby -Noise Level	<40dB	31.7dB	<35dB	<38dB
Printing -Noise Level	<50dB	43.3dB	<46dB	<48dB

*As quoted by manufacturers - 2/4/92 E & OE

All Trademarks are acknowledged

DUAL BIN VERSION
SPECIAL PRICE WITH UNIVERSAL FEEDER
(AS SHOWN ABOVE)
£799
+VAT=£938.83
Ref: LAS 5200 + LAA 5238
(NORMAL FEEDER RRP £135+VAT)

LP1200 (WITH SINGLE BIN) SILICA PRICE:
£699
+VAT=£821.33 Ref: LAS 5200

SILICA SYSTEMS OFFER YOU

- ***FREE OVERNIGHT DELIVERY:*** On all hardware orders shipped in the UK mainland.
- ***TECHNICAL SUPPORT HELPLINE:*** Team of technical experts at your service.
- ***PRICE MATCH:*** We normally match competitors on a "Same product - Same price" basis.
- ***ESTABLISHED 12 YEARS:*** Proven track record in professional computer sales.
- ***BUSINESS + EDUCATION + GOVERNMENT:*** Volume discounts available **081-308 0888.**
- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new laser printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or consumables, or help and advice. And, will the company you buy from contact you with details of new developments and products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE 081-309 1111

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-308 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA **Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening Fax No: 071-323 4737

LONDON SHOP: Selfridges (1st Floor), Oxford Street, London, W1A 1AB **Tel: 071-629 1234**
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Extension: 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

To: Silica Systems, AMCOM-0792-75, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON THE RICOH LP1200

Mr/Mrs/Miss/Ms: .... Initials: .... Surname: ....

Address: ....

.... Postcode ....

Tel (Home): .... Tel (Work): ....

Company Name (if applicable): ....

Which computer(s), if any, do you own? 75B

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

MJC COMPUTER SUPPLIES

Suppliers of Discount Software since 1984

Educational, Local Authority and Government orders welcome. European orders please call or write for a quotation. All goods subject to availability, prices subject to change without notice. E&OE

Prices Include VAT and delivery by post, Courier delivery available on request. Please allow 5 days for cheque clearance

TO ORDER: Credit card orders can be placed by calling the telephone number below – or send a cheque/POs made out to MJC Supplies to:

MJC SUPPLIES (AC), Unit 2 The Arches, Icknield Way, Letchworth, Herts SG6 1UJ. Tel: (0462) 481166 (6 Lines)

NAKSHA UPGRADE MOUSE

280 DPI quality replacement mouse - pack includes Mouse House, Mat and Operation Stealth game.
MJC Price £21.95

NEW – A500 Plus 1Mb Expansion

1 Mb expansion for the A500 Plus – fits in the trap-door taking your memory to 2Mb – no internal fitting.
MJC Price £39.95

SUPRA 500RX EXPANSIONS

New memory expansions for the A500 – plugs directly into the HD expansion port – NO INTERNAL CONNECTION
SUPRA 500RX 1Mb (Expand to 2Mb) £99.00
SUPRA 500RX 2Mb (Expand to 8Mb) £145.00
SUPRA 500RX 4Mb (Expand to 8Mb) £209.00

NEW – ROBOSHIFT

Auto sensing joystick/mouse switch box.
MJC Price £13.95

CUMANA CAX 354 DISC DRIVE

Quality brand name 3.5" second drive includes thru port, disable switch and FREE Virus X Utility.
MJC PRICE £54.95

NEW ROCLITE RF382C DISK DRIVE

New Super Slimline super quiet second drive
MJC PRICE £57.95 (Cream only)

GVP PRODUCTS

GVP A500/500 Plus 52Mb Hard Disk: Features on board RAM expansion to 4/8Mb with high speed Faastrom controller. Autobooting, includes excellent easy to use installation software.
MJC PRICE £349.95

GVP 286 PC EMULATOR: For use with the A500 Hard Drive. 286 speed running at 16Mhz.
MJC PRICE £229.95

GVP S II Hard Drive (A1500/2000): Quality Quantum drives running as fast as 11ms plus the excellent GVP controller board, with the ability to add up to 8Mb memory (SIMMS).
52Mb version £279.95
NEW 120Mb version £419.95
SIMM Modules – £64.95 per 2 Meg

SUPRA A1500/2000 MEMORY BOARDS

SUPRARAM memory cards with space for up to 8Mb
SUPRARAM with 2Mb fitted.............£145.00
SUPRARAM with 4Mb fitted.............£195.00
SUPRARAM with 6Mb fitted.............£255.00
SUPRARAM with 8Mb fitted.............£295.00

AMIGA WORDPROCESSORS

Kind Words 2 (not A500 plus).............£29.95
PenPal.............£54.95
WordWorth V1.1 – Genuine UK version.............£74.95

PROTEXT – Version 5.5

Latest version of this best selling word processor for those wanting serious processing power, includes new 110,000 word dictionary and Thesaurus. (1 meg).
MJC PRICE £99.95

Protext V4.3 – new low price.............£39.95
Prodata V1.2 Amiga.............£64.95

NEW – ACTION REPLAY III

MJC PRICE £57.95

MISCELLANEOUS

Deluxe Paint 3 Video Tutorial.............£17.95
Stereo Master.............£29.95
Techno Sound Turbo.............£29.95
Personal Finance Manager.............£22.95
Maxiplan Plus.............£34.95
Home Accounts 2.............£36.95
Deluxe Paint 4.............£59.95
Hisoft Devpac 3.............£47.95
Hisoft Hi-Speed Pascal.............£69.95

ROMBO PRODUCTS

NEW – TAKE 2
New animation package from Rombo.
MJC PRICE £59.95

VIDI COLOUR SOLUTION

Vidi colour package – including Vidi digitiser Vidichrome software and Free Photon Paint.
MJC PRICE £49.95

RGB SPLITTER

For use with Vidichrome or Digiview. (Includes PSU)
MJC PRICE £49.95

COMPLETE COLOUR SOLUTION

Package includes Vidi Amiga, Vidichrome and the RGB Splitter for a complete colour digitising outfit.
NOTE: For best colour pictures you require a video camera or perfect still frame VCR.
MJC PRICE £99.95

Comp Col Solution + Take 2
MJC PRICE £139.95

ROMBO PRICES HELD WHILST STOCKS LAST

NEW – MEGAMIX MASTER

New Stereo sampler and digital effects package.
MJC PRICE £28.95

VIDEO TITLING/PRESENTATION

Big Alternative Scroller.............£42.95
Broadcast Titler II.............£159.95
Broadcast Font Pack.............£89.95
Broadcast Font Enhancer Pack.............£89.95

ZVP VIDEO STUDIO

Great video production package (1Mb + 2 drives)
MJC PRICE £89.95

ROCTEC ROCGEN GENLOCK

Budget priced genlock, includes fader.
MJC PRICE £99.95

AMOS – The Creator

NEW – EASY AMOS – Powerful but easy.............£25.95
AMOS v1.2 – The original language.............£32.95
AMOS Compiler.............£19.95
AMOS 3D.............£21.95

AMIGA EDUCATIONAL

FUN SCHOOL – Probably the best selling Educational Software for the Amiga – great sound and graphics and now conforms to the National Curriculum (FS3 &FS4).

Fun School 2 – 8 programs per pack

Fun School 2	under 6	£12.95
Fun School 2	6 to 8	£12.95
Fun School 2	over 8	£12.95

Fun School 3 – 6 programs per pack

Fun School 3	under 5	£15.95
Fun School 3	5 to7	£15.95
Fun School 3	over 7	£15.95

NEW Fun School 4 – 6 programs per pack

Fun School 4	under 5	£16.95
Fun School 4	5 to 7	£16.95
Fun School 4	7 to 11	£16.95

All Fun School programs will work with a standard 512k Amiga and the new A500 Plus.

KOSMOS Answerback Junior Quiz
Includes 750 General Knowledge questions & a game reward.............£14.95

Answerback Senior Quiz
As above but for age 12+.............£14.95

Factfiles
Add on question packs for the Answerback Quiz
Factfile Spelling (6-11).............£7.95
Factfile Arithmetic (6-11).............£7.95

Kosmos
Language tutors with a vocabulary of over 2,500 words & the ability to add your own – up to GCSE level.
French Mistress.............£14.95
German Master.............£14.95
Spanish Tutor.............£14.95
Italian Tutor.............£14.95

KOSMOS MATHS ADVENTURE: The latest offering from Kosmos covers the National Curriculum maths using a series of four games. There are four difficulty levels and your performance can be kept and printed out. (6-14).....£17.95

LCL SOFTWARE
Primary Maths Course (3-12).............£19.95
Micro Maths (GCSE level).............£19.95
Micro French (GCSE level).............£19.95
Micro English (GCSE level).............£19.95
Reading & Writing Course (3+).............£19.95

TRIPLE R EDUCATIONAL SOFTWARE:
Picture Book: Four educational games covering the Alphabet, Spelling, Counting and Snap - using pictures to illustrate the answer (ages 2-5 years).............**MJC** £14.95

Money Matters: An introduction to British Currency, from simple recognition to shopping & change. (ages 2-5 years).............**MJC** £14.95

Target Maths: Four games designed to improve mathematical skills, aimed at the National Curriculum. (ages 6-13 years).............**MJC** £14.95

HOORAY FOR HENRIETTA (age 5-12) Making maths fun – covering the four basic maths operations with 8 skill levels and a Parent section for customisation.............£17.95

HENRIETTA'S BOOK OF SPELLS.............£17.95

Further information on our Educational range is available in our Educational Supplement – on request

VISA **Remember – prices include VAT & delivery** MasterCard



Great movers

Amiga artist Phil South checks out the best in Amiga 2D animation programs, and asks "is there life after DPaint?"

It's odd, isn't it? Many people who bought an Amiga did so originally because of a number of classic animated demos. That's not putting the Amiga or the people who bought it down, because let's face it, those demos must have been damned good to make someone part with several hundred quid just to find out more.

It must have been quite frustrating for those first buyers to discover that although the Amiga was powerful enough to show animations with great stereo sound, the way these animations actually got into the machine in the first place was actually far from simple.

The Ami did have one big plus – a standard for graphics and animation, IFF ANIM and ILBM – but had few ways to manipulate them.

But this was soon to change, and the people who wanted so badly to create great animations could actually do so, finally. Quality animation products began to emerge about three to four years ago, and they've been growing in complexity and powerful features right up to the present day. Now anyone can produce the kind of animation which would sell Amigas.

You can produce animation which is exactly like the cartoons you see on TV, even produced in the same way in fact, or you can create totally freeform computer art.

Either way, you can make art on the Amiga which you wouldn't be able to do in any other way.

Let's dip a toe into the world of Amiga animation, and see what colour it comes out. The animation programs for Amiga have altered over the years, but some names stay there all the time, with just a slightly bigger number on the end each time.

Other programs transform themselves beyond recognition and then change their names, but it remains that some of the major players in Amiga Animation have been there since the Amiga was called Lorraine and only owned by a handful of people in California.

DeluxePaint IV

Electronic Arts – £89.95

DPaint is something of an institution, having been around since the Amiga was made, but it's not just that which makes it good. As well as being easy to use, it's also now more powerful than it's ever been.

It slipped for a while when other programs had animation and it was paint only. But DPaint came back with v3 which was not only an animation program, but one of the most powerful around.

The best thing about it was that it could work like a conventional animator would work, but it had advantages over the standard pen and paper approach – like the way you can draw something and flip back and forth through the pages to make sure it worked.

But it couldn't handle HAM, the most colourful Amiga graphics mode, which was a big minus as at least two other programs had HAM and one of those, a forerunner of Spectracolor, even had HAM animation.

So when the program was upgraded to the current revision, it had both HAM and HAM animation, ensuring its future for some time to come.

I've always used DPaint for single graphics, and for that (no matter what has come along since) nothing quite does the trick like DPaint for actually creating graphics, no matter what is used to move those graphics around.

But since it's featured animation, it's always been installed on hard disk. As well as improving the speed and adding a HAM mode. You still can't whack the interface, even in its new 3D incarnation. But the animation capability of the program has increased a skipload.

In the past, certain lesser programs had a "blueing" facility, meaning that you could see the previous screen under the current one. Alignment in animation programs is everything, as this is how you get life into your animations.

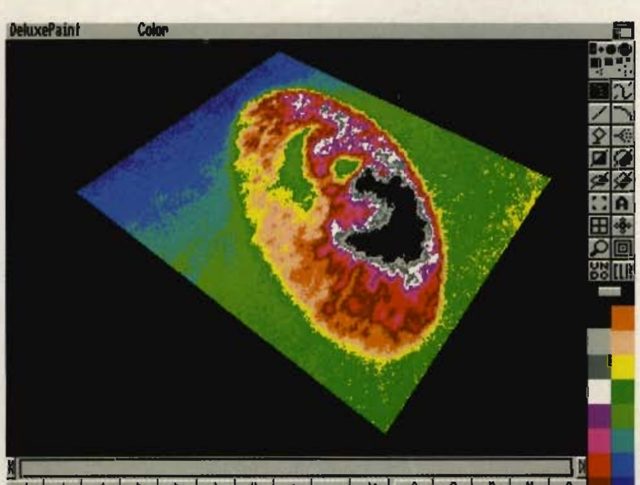
The new DPaint has the facility to put your "cells" on a lightbox. In reality, a lightbox is a box with a translucent top and lights inside. If you put a slide or a cell on top of it you can see the detail and colour much better, and if you put a number of cells together you can see through them.

Anyway, you get the gist. DPaint has this facility, whereby you select this mode and a number of previous screens can be seen "behind" the current screen.

This adds to the increase in speed, plus the powerful graphics processing like translucency, tinting and stencilling (something that no other program does well), and you've got the biggest and best graphics origination and animation engine available.

Like the Terminator, DPaint just keeps going until it gets there.

Ease of use
●●●●●●●●●○
Graphics handling
●●●●●●●●●○
Compatibility
●●●●●●●●●○
Value for money
●●●●●●●●●○
Overall
●●●●●●●●●○



The familiar face of the DPaint animation interface

Disney Animation Studio

Disney Software – £79.95

Although something of a young upstart in the animation stakes, Disney have a reputation to keep up after all, so they tried very hard to bring out something a little different.

Although not as good a graphics program as DPaint, it scores very highly in the animation department, being the first such program, before even DPaint even, to feature bluing. It called it onion skin, meaning that – like the skin of an onion – it's transparent. Although modelled on, and trying very hard to be better than, DPaint in its interface and layout, it had a few problems in its way.

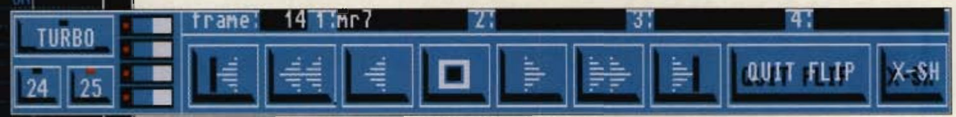
The program is actually three programs, all run from a "supervisor program", so you draw and pencil test in one program, figure you exposure sheet, then export to another program to colour and sequence. It's all a bit cumbersome, although this doesn't detract from Animation Studio's charm.

It has two primary functions, which are different on the whole from the aims of a more broadly-based program. One is to teach animation, which it does very well.

Included in the program are a range of ➤



An interface the old guard will know and love, showing a "dope sheet" listing all the frames in the anim



DPaint style tape deck controls, now making their mark on Plus Counts Animation systems

demonstration files contributed by Disney animators. They take you through all the things about animation that you really need to know, like in-betweening (sometimes called "tweening"), squash and stretch, arcs, paths of action, anticipation, bipedal walking and running cycles, and quadruped walking and running cycles.

The second use is to create animations with a soundtrack, as the exposure sheet allows you to synchronise a few sampled sounds with your animations. This would be good as a part of a demo, especially as the program has the ability to save IFF ANIM format.

Although Disney's Animation Studio isn't a great all-rounder, it's good enough at the things it does to warrant your attention, especially if you're a complete beginner and want to learn about animation in the most painless and interactive way possible.

Ease of use
●●●●●●●○○○
Graphics handling
●●●●●●●●○○
Compatibility
●●●●●●●○○○
Value for money
●●●●●●○○○○
Overall
●●●●●●●○○○

Spectracolor

Oxxi Aegis – £65.99

Although not under this name, Spectracolor has been around a good long time. The writers of the program, Bazbosoft, are more famous for Photon Paint and Photon Paint 2, a very good HAM animation package of a few years back.

Spectracolor takes all the things they did for Photon Paint and expands them.

Although it can't handle normal modes as well as HAM, it has learned a lot from DPaint, and has obviously been listening to users gripes over the years. One thing they've kept which I think they ought to have lost is the menus that fly up the screen. Functional I guess, but very subtly annoying.

In spite of the fact that a lot of programs have come along which make use of similar tools to Spectracolor's features, it's still the original and best HAM animator. DPaint has the edge on speed, and fits into a smaller space in memory, but Spectracolor has some very neat features.

I particularly like the wrap on objects feature, which takes a brush and maps it to one of seven predefined 3D shapes. But you can also construct your own 3D surface and wrap your brush on it.

Obviously you can animate your 3D wrapped shapes too – making for realistic flags etc, I guess – but this feature is fairly limited in what it can do for you animation in a 2D frame. Spectracolor is one of those programs which looks brilliant on the surface, and really packs in the features. But like so many programs, all that's needed from an animation program is not fluffy dice, woofers, tweeters and slimline salad dressing.

All you need is to animate, and anything that doesn't speed you to that cause is excess baggage.

Spectracolor has lots of features but it could do with only having about half of them, devoting the extra memory space for buffers to speed up HAM redraw.

It's very slow and needs more leg room, as the program and all its bits take up a lot of room. It will run for painting in 512k machines, but needs at least 1Mb for animation – that's a bare minimum, and if you intend doing any animation seriously, you'll need upwards of 2Mb.

DPaint suffers from similar restrictions, but then again DPaint has lower powered resolution modes to fall back on.

Spectracolor is a very professional program, although I wouldn't trade up and use it myself.

Ease of use
●●●●●●○○○○
Graphics handling
●●●●●●●○○○
Compatibility
●●●●●●○○○○
Value for money
●●●●●○○○○○
Overall
●●●●●●○○○○

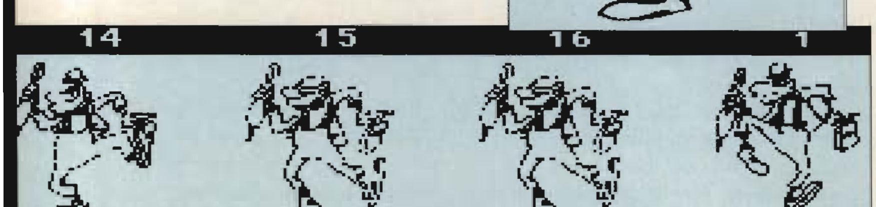
Take 2

Rombo – £95

Now this is something new, and not just a new program, but a new type of program completely. Rather than being a muscular graphics package, Take 2 is rather like the best bits of Disney Animation Studio, but with a few subtle twists.

The program is supposed to be used as


From paper to pixels, thanks to Take 2



The take 2 storyboard showing the "tweens" within your would-be anim

Jargon buster

Anim
The IFF standard for animation, where a series of pictures are stored together as one file, compressed by only keeping note of the differences between frames.

Cell
A single picture drawn for the purposes of an animation on paper or clear plastic.

Digitiser
Device for taking the output of a video camera and storing it as a picture file in a computer.

Exposure sheet
List of shots for an animator to plan his animation down to the last frame.

Flipper
Also called Page Flipper. A program which takes a series of frames and flips through them as an animation.

Key frame
The extremes of an animation, usually drawn first, and then tweened to get the in-between frames.

Line Test
A test of an animation where the pencil sketches are animated using a video camera and a stop frame video.

Ones, Twos and Threes
Each cell is shot once, twice or thrice to alter the timing, or save film.

Peg Bar
A couple of pegs in the animator drawing board and camera setup to ensure correct registration of the cells.

RGB Splitter
A device to separate the red, green and blue elements of a picture digitised from a video source.

Tweening
The process of drawing – or computing – the frames between key frames of an animation.

VCR Controls
On-screen buttons in an animation program which loosely correspond to the controls on a VCR.

Checkmate - The Amiga only Developers

Try WorkBench 2.0, It's well worth the upgrade.

Hardware

Programing

Graphics

Graphics - Hi-Res cards for everybody from £229.00

The latest 24 bit sensation has arrived!

AVideo 24 from Archos

24 bit graphics for all Amigas with 768 x 580 Resolution.
1.7 mb 24bit (16.8 Million Colours) Frame Buffer,
with double buffered 12 bit display at same resolution.
Digitaly overlay Amiga graphics and animation.
Flicker Fixer and external Genlock Compatible.

Includes the Amazing TVPaint 1.6 paint software

All this for the Amazing price of ONLY £ 599.00 including Vat

PIP in 24bit



Supports any software that can output 24 bit ILBM format files.

Please note that TVPaint 1.6 supports the new JPEG format!

Hardware - Best Prices in Town

HiQ Tower Special Launch Offer

HiQ

Orders are now being taken for delivery in March.
This is the new version that wowed 16 bit show goers.
Retail price in March will be £ 449.00.

Order now and pay £ 399.00

£ 50.00 deposit required, please note that the orders already taken for this product have tripled our first production estimates. ! THIS IS A HOT PRODUCT !

HiQ Tower includes 5 x B2000 Slots, 1 x CPU Slot,
1 x Full Video Slot, 4 x PC Slots, 220watt Power Supply
10 x 5.25" or 3.5" Drive bays, Seperate Keyboard.
Compatible with B2000,A1500,A500 and some A3000 cards.

Give your Amiga A500 a new look.

Look out for the American Magazines, they love it.
Ring for prices on other hardware including Accelerators.

Programming - Great Software

CanDo Software authoring, the ultimate in program generation for regular ordinary people.
Read the Rave reviews in all the magazines, ring for details.

NOW IN VERSION 1.6 ONLY £ 99.00

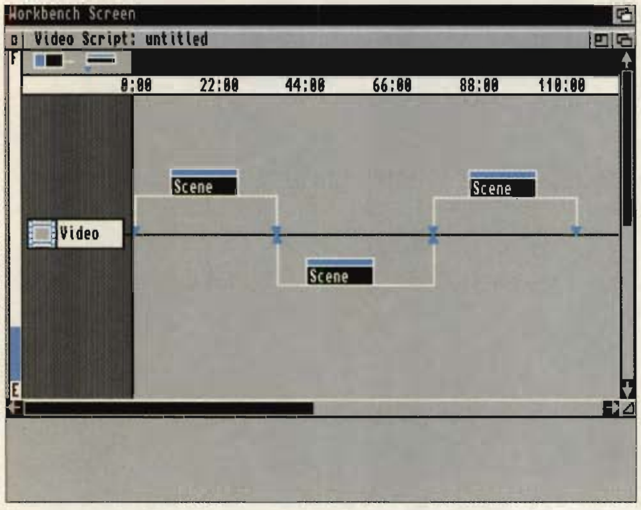
CanDo Test Drive package	£ 10.00
CanDo Pro-Pak and Intro-Pak, tutorials for CanDo	£ 49.00
Hyper Helpers, make your life just that bit easier.	£ 29.00
Interface Design Kit, Clip art Gadgets etc. for all users.	£ 49.00
Canvas, wonderful graphics clip art from Warners studios	£ 25.00
Luna Construction Set for extra terrestrial animators	£ 25.00
Power Windows 2.5 for the professional without time to waste.	£ 69.00
INOVAtools, all those little utitlities you never quite finished.	£ 99.00

Opus Directory, the ultimate directory utility, Version 3.41
Only £ 39.00 to improve your life

Checkmate

CHECKMATE DIGITAL LIMITED

Tel +44 (0)71-923 0658
Fax +44 (0)71-254 1655
BBS +44 (0)71-923 2608
80 Mildmay Park
London, N1 4PR, UK



Automatic video scripting makes the compilation process simple

a traditional animation suite, along with a camera and digitiser. The frames are drawn as cells or sheets of paper and registered on a peg board, just like real animation. Each frame is then "photographed" by the digitiser and stored onto disk.

Once on disk, the animation can be loaded into Take 2 for playback, but this isn't just a simple animation player. You can sequence the frames rather than merely play them back in a long line.

It's more random access than linear, meaning that you can build up a large animation from a very few frames, simply by running through a few frames over and over but in a number of different orders.

Say for example you have a sequence of 200 frames – possible if you have large amounts of memory. The first sequence could be the first 12 frames, with each frame being displayed for 2 x 25ths of a second (simulating "twos"). The next series of frames is the last 25, also on twos. After that you can show the frames from 26 to 100.

Then the frames from 1 to 25 again. And again. Then the frames from 101 to 150. And then back to frames 1 to 25 again.

You don't have to be a rocket scientist to figure out that this is a very good idea, and has many professional applications. Line testers are expensive, and the fact that you can digitise and line test and re-sequence from within the very same program makes this a very competitively priced piece of kit.

Professional line testers can run into thousands of pounds. But far from being lofty pieces of kit which can only be used by dedicated professionals, Take 2 has another essential ingredient – it's fun.

But the addition of being able to use any Amiga graphics mode, including HAM, and the ability to load and use DPaint single pictures and anims puts it into a class of its own. A pro quality product which everyone can use.

Ease of use
●●●●●●●●○○

Graphics handling
●●●●●●●●●○

Compatibility
●●●●●●●●○○

Value for money
●●●●●●●●○○

Overall
●●●●●●●●●○

Fantavision

Broderbund – £49.95

Although not fitting into the usual 2D animation categories very readily, this oddity is enough fun to warrant a mention at the very least.

The process used to great effect in this program, besides being able to use graphics generated in another program, is the tweening effect it uses to animate between different shapes. This is a unique effect, and a great idea, which unfortunately finds no real use outside of this program. But it is a lot of fun to play around with it. I'd file this one under "cute, but no lasting value".

Ease of use
●●●●●●○○○○

Graphics handling
●●●●○○○○○○

Compatibility
●●●●○○○○○○

Value for money
●●●●●○○○○○

Overall
●●●●○○○○○○

DeluxeVideo III

Electronic Arts – £99.99

Although getting on in years, DVideo III is still a valid contender for animation program of 1992. You might experience problems getting hold of a copy – it's not seen as a totally hot product on account of its age – but do try, as it's still one of the most flexible and complex animation systems you can buy.

If you have large quantities of RAM, your animations can be loaded from memory and be as smooth as you like.

Like Take 2 it's not a graphics creation engine but a graphics sequencer, like a Midi sequencer. You take your raw materials, the graphics, and move them around.

Unlike Take 2 however it's less traditionally based, and doesn't really lend itself to that style of animation. It is however very impressive in what it can do in the way of manipulation. It's a computer animation system, not a traditional cell animation system.

The most impressive part of the system is the way in which it sequences animations and sounds together, where the sequences aren't put together in scripts or using frames like other programs.

The scripts are formed by placing objects or icons on a time line, in much the same way as a lot of multimedia programs do today. In this respect it was way ahead of its time, like so much of the original EA software for the Amiga.

It's most remarkable for the length of animations that it can produce, as it relies on objects travelling across backgrounds, rather than whole frames.

This means that – provided you have enough room on the disk for your backgrounds and objects – your animations "videos", as they are called in the program, can be as long as you like.

The diversity of uses makes this an extraordinarily useful utility to add to your graphics program, rather than a standalone animation engine. AC

Ease of use
●●●●●●●●○○

Graphics handling
●●●○○○○○○○

Comptability
●●●●●○○○○○

Value for money
●●●●●○○○○○

Overall
●●●●●○○○○○

Contacts

Electronic Arts
Langley Business Centre
11-49 Station Road
Langley SL3 8YN
Tel: 0753 549442

Rombo Productions
Baird Road
Livingstone
Scotland EH54 7AZ
Tel: 0506 466601

Disney Software
Entertainment International
4 The Stannetts
Laindon North Trade Centre
Basildon SS15 6DJ
Tel: 0268 541126

Micropace/Oxxi Aegis
171 Bath Road
Slough SL1 4AA
Tel: 0753 551777

Broderbund
HB Marketing
Tel: 0753 686000

Conclusion

1. DeluxePaint IV
The all-time supremo, still top of the heap after all these years.

2. Take 2
Newcomer, with superb sequencing ability, and the bonus of online digitising.

3. Disney Animation Studio
Great animation tutorials, and traditional animation methods for the die hard.

4. DeluxeVideo III
Advanced sequencer and multimedia program. More uses than a dead cat.

5. Spectracolor
HAM animation program for those with deep pockets for extra memory and hard disks.

6. Fantavision
Interesting curiosity, but no more than that.

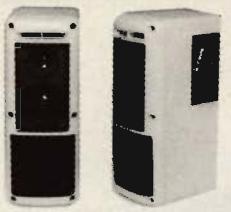
The reason that good old DPaint got straight As is that it's always stayed on top by constantly upgrading. When the other programs on the market got more sophisticated, DPaint always came back for more.

It's interface was always the best and easiest to use, due entirely to Dan Silva's original program. Dan worked originally for Xerox at the Palo Alto Research Complex, where all the modern computer interfaces were originated, and at Lucasfilm.

So it's fitting that DPaint should be the easiest and most powerful program in the history of Amiga. When Dan got tired of upgrading DPaint, the task was taken over by Lee Taran, a Stanford AI major who lives with her husband in Palo Alto.

She did an awesome job of bringing the old favourite into the 90s. Although on occasions other programs have offered features which DPaint didn't have.

ZY-FI amplified stereo speakers



REALISE THE TRUE SOUND POTENTIAL OF YOUR AMIGA WITH THIS PAIR OF FULL RANGE SPEAKERS !

Your Amiga produces fine quality hi-fi stereo sound. Enjoy quality stereo sound reproduction *to the full* with this specially designed, great new twin speaker system! Features reflex ported speaker design with 3 separate drivers in each unit, and incorporates a built-in amplifier with adjustable volume control. Runs from PSU (supplied) or from batteries (not included).
Speaker Dimensions 248x93x125mm (HxWxD)

ONLY £39.95

TOP VALUE 400dpi HANDY SCANNER

QUALITY SCANNING - AT THE RIGHT PRICE !

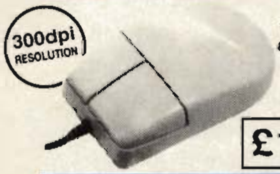


Representing outstanding value for money, this package combines *top quality* scanning hardware with the latest version of the distinctively powerful *DAATASCAN PROFESSIONAL VERSION 2* software.

At a genuine 400dpi scanning resolution, this new scanner produces truly superb quality scans. Has a full 105mm scanning width, variable brightness control and 100 / 200 / 300 / 400dpi resolution. **Daatascan Professional Version 2** scanning *and* editing software allows real-time scanning in either line art or in up to 64 simulated grey scales. Provides powerful editing features and excellent compatibility with most DTP and Paint Packages, eg. Deluxe Paint 4, Touch-Up.

ONLY £99.99

TRUEMOUSE

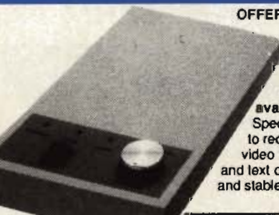


WE GUARANTEE that this is the smoothest, most responsive and accurate replacement mouse you can buy for the Amiga. Excellent performance, now with a 300dpi resolution. Amazing new price!

£16.99 SATISFACTION GUARANTEED

GOLDEN IMAGE OPTICAL MOUSE Amiga/ST compatible - excellent *travel+accuracy* assured. NEW LOW PRICE!.. £ 29.00

ROCGEN GENLOCK MK.II



OFFERING EXCEPTIONAL VALUE FOR MONEY, this fully compatible GENLOCK adaptor offers levels of quality, function and sophistication not normally available in this price category. Special features include the ability to record graphics & animations on video recorders and overlay graphic and text onto video. Capable of smooth and stable fading and overlaying effects with special tuning knob.

ONLY £89.99

ROCGEN PLUS

Compatible to any Amiga or Commodore CDTV, this NEW Genlock Adapter provides Advanced Special Effects and Performance Features without sacrificing user-friendliness!

New Special Features include: Dual Dissolve control knobs providing freely adjustable degrees of overlay or invert (keyhole) effects; Auto Video pass-thru; extra Video throughport for separate line monitoring; RGB pass-thru for real-time editing of Amiga graphics; plus Key-in port for use with an external keying device.



ONLY £129.95

PHILIPS 15" TV/MONITOR



With its dedicated monitor input, this model combines the advantages of a high quality medium resolution colour monitor with the convenience of remote control Teletext TV - at an excellent low price ! Features dark glass screen for improved contrast, plus full range 3-way speaker sound output .

£269.00 Including VAT, delivery & cable

Philips CM8833 Mk.II Monitor (Genuine UK version) inc.cable, 'F19' Flight Sim. game & 1 Year on-site maintenance .... £ 219.00

A590 ADD-ON HARD DRIVES

A590 OWNERS! Expand your hard disk storage further with one of our add-on, externally cased SCSI Hard Drives, with 25ms autoparking NEC mechanisms and separate power supply. Plugs into the socket provided on the rear of the A590 unit.

External 40Mb SCSI Drive cased with PSU to directly add-on to the Commodore A590 .... £ 249.00
External 100Mb SCSI Drive cased with PSU .... £ 399.00

AMIGA 500 ○ AMIGA 600

NEW! AMIGA 600

Built-in TV Modulator • Kickstart 2 • 1Mb ChipRAM • Built-in IDE Hard Disk Controller • Accepts Memory Cards

INCLUDES DELUXE PAINT & EXCITING GAME TITLE

ONLY £349.99
2MB RAM/CLOCK VERSION £389.99

20MB HARD DISK VERSION ALSO AVAILABLE - ONLY £449.99
2MB RAM/CLOCK VERSION £489.99

A500+ 'CARTOON CLASSICS' PACK

- 'AMIGA 500 PLUS' with 1Mb RAM, 1Mb Drive, Kickstart 2, Workbench 2, TV Modulator, Mouse etc.
- 'DELUXE PAINT III', 'LEMMINGS', 'CAPTAIN PLANET', 'BART SIMPSON vs. THE SPACE MUTANTS'

ONLY £349.99
2MB CHIPRAM VERSION £379.99
HURRY WHILE STOCKS LAST!

'CARTOON CLASSICS EXTRA' PACK

Includes Pack as above, plus Virus Protector, Mouse Mat, Joystick *plus* these *Games* :

'Better Dead Than Alien'	'GAZZA 2'	'CARDIAXX'	'Subbuteo'
'Tracksuit Manager 90'	'Battle Squadron'	'NIGEL MANSELL'	'ASTERIX'
'20,000 Leagues Under The Sea'	'Under Pressure'	'High Steel'	'The Ball Game'
'Tank Battle'	'Diet Riot'	'Night Walk'	'Block Alanche'
'Treasure Trap'	'Lost'N'Maze'	'DiskMan'	'Text Plus' & 'Scalc'

ONLY £379.99
2MB CHIPRAM VERSION £399.99
HURRY WHILE STOCKS LAST!

Commodore A590 20Mb Hard Drive .... £ 299.99
A590 512K RAM Upgrade .... £ 29.95
A590 1Mb RAM Upgrade .... £ 59.95
A590 2Mb RAM Upgrade .... £ 99.95
Amiga 1500 Starter Pack (1Mb RAM, 2x3.5", Colour Monitor, 'DPaint 3', 'Platinum Works', 'Home Accounts', 3 x Games, etc) .... £ 829.00

NEW! A500+ ROM SWITCHER

SWITCHING BETWEEN VERSIONS OF KICKSTART ON YOUR A500+ IS EASY WITH OUR NEW ROM SWITCHER!

You can improve software compatibility on your A500 Plus! By fitting our ROM switcher, you can alternate between the Kickstart 2 already resident and another version of Kickstart ROM chip, giving you the freedom of choice. Fitting is very simple indeed, and requires *no soldering* or special technical knowledge. Fitting allows two methods of switching; either by keyboard reset, or by an external toggle switch. **N.B. Kickstart ROM not supplied.**

ONLY £24.95

Kickstart 1.3 ROM supplied separately for above .... only £ 29.95

NEW! RocHARD HARD DRIVES

HIGHLY RECOMMENDED IN THE MAY ISSUE OF *AMIGA SHOPPER*, THESE NEW HARD DRIVES ARE FITTED WITH HIGH SPEED, TOP RELIABILITY SCSI HARD DISK MECHANISMS.

Very Fast & Reliable • Cooling Fan • Capacity for up to 8Mb of additional Amiga RAM expansion • External PSU • Game Switch • Easy Installation

RocHard Hard Drive with **52Mb** SCSI Drive fitted....... £ 339.90
RocHard Hard Drive with **105Mb** SCSI Drive fitted..... £ 499.90

TRACKBALL



High performance trackball, directly compatible to any Amiga or Atari ST. Plugs into mouse or joystick port. Super-smooth and accurate - you probably won't want to use a mouse again after using this Trackball ! Full one-handed control. Top quality opto-mechanical design, giving high speed and accuracy every time. No driver software needed !

ONLY £29.95

REPLACEMENT A500 PSU



Genuine Commodore Amiga A500 type replacement Power Supply Unit. Good quality 'switch mode' type. Super low price!

ONLY £39.95

STEREO SOUND SAMPLER

Offering full compatibility with almost any Amiga audio digitiser package, our Sound Sampler features excellent circuitry, yielding professional results. The main A/D converter gives a digitising resolution of up to 50KHz, with a fast slew rate. Two phono sockets are provided for stereo line input, plus an option for microphone. Adjustable gain is achieved with built-in control knob. Complete with public domain disk containing sound sampling applications / utilities.

ONLY £29.95

MIDI INTERFACE

Our fully compatible, high quality MIDI interface connects directly with the Amiga serial port and provides IN, OUT & THRU ports for good flexibility. Features LED indicators on each port for diagnostic purposes.
Superb compact design!

ONLY £19.95

VIRUS PROTECTOR

Our compact Virus Protector fits easily to the Port of the last disk drive in your Amiga system, protecting all internal and external drives from boot block viruses. Incorporates a switch to enable or disable the protection facility.

ONLY £6.95

VIDI-Amiga video digitiser package inc. VIDI-Chrome.................... £ 110.00
VIDI Complete Colour Solution Kit.................... £ 149.95
VIDI-RGB colour frame generation kit from B&W images .... £ 64.95
Kickstart 1.3 Upgrade .... £ 29.95
Amiga 500 Dust Cover .... £ 4.95

PRINTERS

Prices Include VAT, Delivery and Connection Cable

Gold star REGISTERED DEALER

EVESHAM MICROS STAR PRINTERS INCLUDE 12 MONTHS ON-SITE WARRANTY

STAR LC20 9-Pin Printer



SUCCESSOR TO THE BEST SELLING LC-10, WITH MANY FEATURES AND FAST OUTPUT

Providing superlative paper handling, four excellent NLQ fonts and a new super-fast print speed of 180cps in draft and 44 cps in NLQ, the LC20 appropriately supercedes the phenomenally successful LC10 !

ONLY £129.99

Star LC24-200 COLOUR Printer

COMBINES HIGH QUALITY 24-PIN COLOUR PRINTING WITH EXCELLENT VERSATILITY - AT A BUDGET PRICE!



- 24-Pin 7-Colour Printer
- 200cps draft / 67cps L.Q.
- 222cps High speed draft facility
- 30K Buffer expandable to 62K
- Swivel Selectable Push or Pull Tractor, with bottom feed capability
- Advanced Paper Parking
- Electronic Dip Switches
- 10 Resident LQ fonts
- Both Colour and Mono Ribbons included

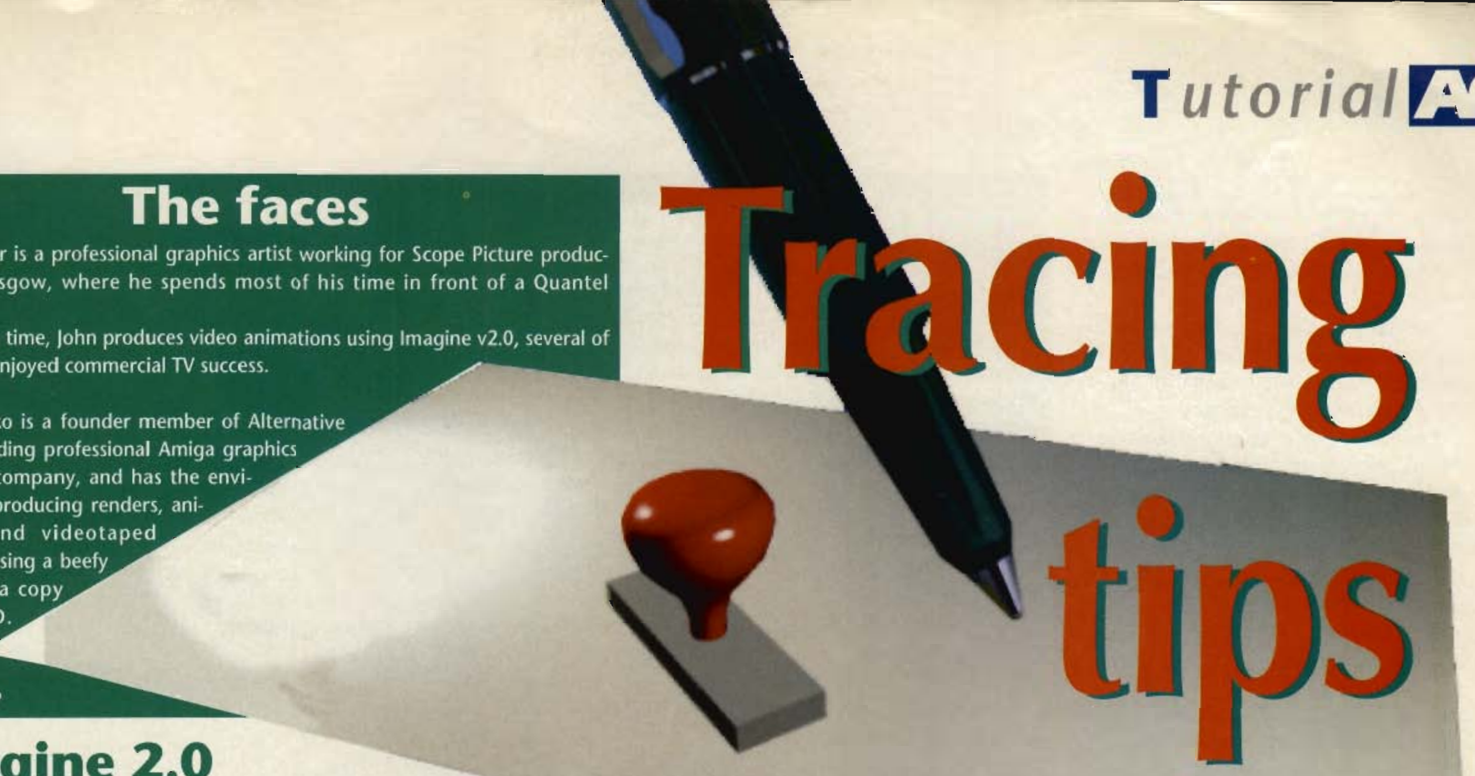
ONLY £269.99

Star LC 200 9-Pin Colour, 4 fonts, 180/45cps .... £ 199.99
NEW! Star LC 24-20 24-Pin, 4 fonts, 180/60cps .... £ 209.99
Star LC 24-200 24-Pin, 5 fonts, 200/67cps, 10" carriage .... £ 239.00
Automatic Sheet Feeder for 10" LC printers (pls.state model)... £ 64.95
Star XB24-200 COLOUR 24-pin, 80 col. power printer.............. £ 369.00
Star XB24-250 132 column version of XB24-200 .... £ 439.99

Citizen Swift-24E including COLOUR kit.................... £ 299.99
Olivetti JP-150 Inkjet good quality - exceptional value.................... £ 249.99
Olivetti JP-350 Inkjet excellent high speed 300dpi printer .... £ 349.99
Hewlett-Packard Deskjet 500.................... £ 359.00
Hewlett-Packard Deskjet 500C (Colour).................... £ 559.00
Citizen Projet Inkjet Printer .... £ 399.99
Epson LX400 budget 10" carriage 9-pin 180/25cps.................... £ 139.00
Epson LQ100 24-pin 180/60cps, 8k buffer.................... £ 205.00
Panasonic KXP1124i uprated 24-pin model 300/100cps .... £ 279.00
Panasonic KXP1123 good value 24-pin model.................... £ 215.00

SOFTWARE

Digita Wordworth	£ 99.00	Deluxe Video 3	£ 84.95
Kind Words 2	£ 37.95	MR Backup	£ 29.95
Protext V5.5	£ 120.00	AMOS	£ 37.50
Digita Home Accounts V2	£ 49.00	HiSoft Lattice C	£ 199.00
Deluxe Paint 4	£ 79.99	GFA BASIC V3	£ 39.95
		GFA BASIC Compiler	£ 34.95
		Devpac 2.15	£ 44.95
		Disney Animation Studio	£ 69.95



Tracing tips

Two leading Amiga ray tracing experts offer the benefits of their accumulated experience in the Amiga's top two graphics packages, Imagine 2.0 and Real 3D 1.4

The faces

● John Butler is a professional graphics artist working for Scope Picture productions in Glasgow, where he spends most of his time in front of a Quantel Paintbox.

In his own time, John produces video animations using Imagine v2.0, several of which have enjoyed commercial TV success.

● Henri Bujko is a founder member of Alternative Image, a leading professional Amiga graphics production company, and has the enviable job of producing renders, animations, and videotaped animations using a beefy Amiga and a copy of Real 3D. Life's hard, isn't it Henri?

Imagine 2.0

Tipster: John Butler

Imagine2.0 is an incredibly powerful program and inevitably with this power comes a fairly awesome level of complexity. I can't hope to simplify all aspects of an animation system that requires a 300-page manual, so I'll try to cover two aspects of Imagine – the Preferences page, which I consider essential in order to enjoy and exploit Imagine fully, and the morphing capabilities which set it apart from the rest of the 3D pack.

The Preferences section is important aesthetically and functionally as, straight from the box, Imagine2.0 is one ugly program. The startup page, in particular, looks awful. However one of Imagine's greatest strengths is that so much of it can be tailored to the individual's requirements.

To rid yourself of the startup screen, simply replace the Imagine.pic in the Imagine directory with one of your own choosing. All you have to ensure is that the picture is in 16-colour, hi-res, interlaced 640 x 512 format and that it is named "imagine.pic" – otherwise your program won't boot.

If disk space or startup time is at a premium, then simply choose a blank white screen in this format. On actually entering the program, you are presented with an eye-wateringly ill-chosen combination of garish colours and drop-shadow fonts that will have you reaching for the aspirins in no time.

Thankfully, the Prefs editor is there to save your sight and you should make an early stop there.

This editor allows you, among many other options, to configure your workscreen colours to your liking. Each option is determined by a hexadecimal number (this is a system where the double digit numbers 10 to 15 are replaced by the letters A to F) but if you find this a little abstract to work with you can change values by using the colour swatch at the bottom of the screen.



John's interpretation

As each screen colour is used for several tasks, the trick is to find the right combinations. The screens I use are a particularly soothing selection of greys, white and turquoise and while they may not suit every user, I think they provide a pretty fair starting point. Once you've changed these values, make sure to get used to the new Select and Pick mode colours in the various editors, as they can be a little disorientating at first.



The next feature of Imagine's Prefs page is its ability to set up the ten function keys as hot keys and the creation of "user gadgets" which are Unix-style screen buttons.

These allow you to access menu commands at a key stroke or mouse click. The best way to build up a work environment is to do so gradually, as you begin to realise which menu functions you use frequently.

These will be the ones that will benefit most from assignment to a user gadget or function key. Make a note of the menu bar number, the menu option number and the submenu option number.

Thus for the Detail editor's Transformation function you will see that it is in the third menu bar, tenth menu option, no submenu option. This translates as 3a0 in the Preferences editor's hex format.

Enter the Prefs page, click on the User Gadgets button in the top right-hand corner, click on the "new" line and then enter "trans" and the hex number 3A0 in the slots provided.

Save the changes, re-enter the detail editor and, lo, a button will have appeared at the bottom of the screen, embossed with the legend "trans". Click on this and the all-important Transformation requester will appear.

Again, I suggest adding these slowly, perhaps one or two a session, getting used to them before adding more. Once you have developed a comfortable set of function keys and user gadgets you will find yourself flying round the program.

Once you have set up your screens and so on you might wish to explore Imagine's talent for "morphing". This is the trademark of 3D graphics and when performed smoothly it's a very impressive trick indeed.

Imagine, in common with every 3D program, has plenty of ways of jerking your animation around and thereby ruining the effect. To help you round these obstacles,



From cube to sphere, Imagine's morphing in action

➤

take a look at the box in which I have outlined some ground rules for morphing and some tips to get around these rules if you have to.

Armed with this information and a working knowledge of the manual, you should be able to follow this demonstration tutorial of some morphing techniques.

Enter the Project editor. Make new Project "morphtest". Enter Detail editor. Add a primitive polygonal sphere – accept Imagine defaults throughout unless indicated. Make it active (picked) and access the Attributes requester. Colour it red and save attributes as "sphere.attribute".

Exit Attributes and save model as "sphere". Set grid size to 40. Enter Pick Points mode, pick all points (Amiga-A) and then access the Snap To grid option from the functions menu.

Go back to Pick Object mode and enter Attributes, change colour to yellow, save as block.attribute. Exit Attributes and save model as "block1".

Clear the workspace and add a primitive plane, values: 80, 80, 1, 1. Clicking OK will provide you with an 80 x 80, 2-polygon plane. Enter pick points and select all, access the Transformation requester and translate these points – 40 in the y direction.

Enter Object mode and access the Mold *(sic)* requester (Amiga-E), choose the Extrude option and extrude it for 80 units.

You now have an 80-unit cube. Enter Attributes and load the block.attribute you prepared earlier. Exit Attributes and access transformations, click on the Transform Axes Only button and set the size to 50, 50, 50.

Save model as "block2". Enter Drag Points mode and drag the top four points to the centre of their plane to form a pyramid.

Enter Point mode and reselect these points and Snap To grid to perfect the pyramid peak. Colour this pyramid green and save as "pyramid".

Enter the Stage editor. Load the sphere (make sure you can see it in Camera View mode), save changes and enter the Action editor. Set highest frame number to 25. Go into Add mode and find the slot marked "sphere". Click on the actor timeline at frames 2 and 12, load the block1" object and enter 10 in the Transition Frames slot. Click OK and then click twice on frame 13, load "block2", click on frames 14 and 25, load "pyramid", transition frames 8.

Save changes and enter the Stage editor. Add a light and drag it somewhere behind the camera. Save changes and make a wire frame test.

Hopefully you should see a sphere change into a cube which changes into a pyramid. To see the colour changes, return to the Project editor and make an animation.

While not the most exciting of projects, this tutorial demonstrates the basics of successful morphing in Imagine. The main thing is for you to go on and experiment with this technique!

Morphing made easy

Rules

1 – Morphing objects must have the same structure. This means that the two models you are morphing between must be made up of the same number of objects with the same number of points.

So a model made of two spheres of 100 points each couldn't morph into a model made of two spheres, one an 80-point and the other a 120-point one, but it could morph into a model consisting of a 100-point cube and a 100-point tube.

2 – Brush maps cannot be morphed. Imagine has no way of interpolating bitmap information so any morph between two objects with different maps will result in an unpredictable jump from one to another somewhere in your animation.

3 – On-off attributes do not morph. This refers to attributes such as Phong Shading and Brightness. Like bitmaps, these will also provide you with an unpleasant jerk from state to state in your animation.

4 – Different textures cannot be morphed. Textures in Imagine are algorithms which alter object surfaces but different ones cannot, despite the manual's claims, morph smoothly.

5 – Work "backwards". Always make the more complex model first and then manipulate it in the detail editor into the simpler one. A good example of this is an animation of a cube changing into a sphere – to fashion a sphere from a cube is not impossible, but it is so laborious as to be practically so.

In Imagine's Detail editor though, it is a simple process to make a cube from a sphere using Drag Points mode and the Snap to Grid function.

Tips

1 – To get around Rule 1, you can employ the "backwards" method to transform between two dissimilar objects by "sleight of hand". This done by creating a common, simple shape from each model.

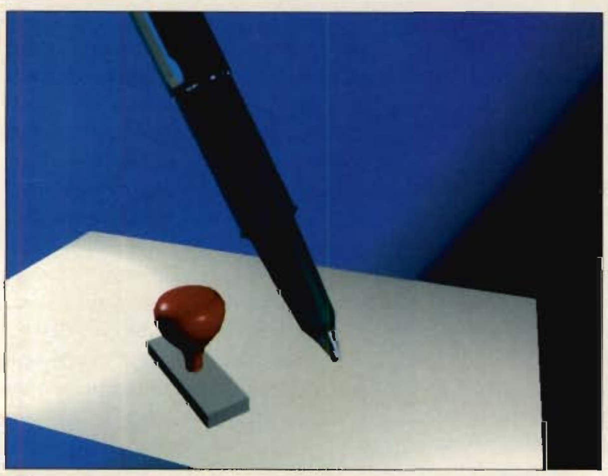
Thus you could make a 100-point letter A transform into a 100-point cube and then substitute it in the middle of the animation for a 200-point cube (of the same size and attributes) fashioned "backwards" from, say, the letter Z.

One thing to be sure of is that the axis is the same size and position in all the models.

2 – To morph brushmaps, prepare a 2D animation in DPaint4, save the pictures in the format "name.0001" etc and then index these in the Attributes section of the detail editor.

3 – Take care to save attributes as you go along so that you can recall materials for different objects and avoid the "jumps" you can get with on-off attributes.

4 – To morph textures, crossfade between two sets, one going from zero to significant values and the other moving in the other direction. The in-text tutorial demonstrates some techniques.



Good objects and decent lighting make for the best Imagine 2.0 results

Real 3D v1.4

Tipster: Henri Bujko

Because Real 3D seemed to offer only solid modelling, many people felt daunted by having to construct objects purely by bolting together primitives and using lathes. Well the good news is that "freeform" modelling is available in both the Beginners and Turbo/Pro versions of the program.

It can seem a little daunting at first because there are no primitives to access and no direct way to build up vertices or faces from scratch. But what there is adds up to a powerful feature. In this particular example I will show you how to make a spiral hollow tube.

First set the grid to units of ten – this helps to locate the centre point of the tri-view more quickly (0, 0, 0) and makes manipulation of objects more accurate and intuitive.

From the Freeform menu option select Create curve – Spiral, click in the bottom left window (this represents the top view of the scene) at zero co-ordinates, and pull out a circle of a 100 units radius.

Accept the defaults in the requester and a spiral curve will appear in the windows. Next, make a loop by using the command Create Curve – Circular Loop. Define the object's centre point in the top left window (the front view) at 0, 0, 0, just like the spiral curve. Drag out a circle of ten units.

Next, make sure that Loop is selected in the file hierarchy table and use the Move command to place it at the bottom of the spiral curve at the start of the line – do this move in the top right window (side view).

By selecting Settings Display Autofocus from the menu, the Loop object will be automatically centred and sized in all windows.

In the bottom left window, use the command Modify Hierarchy Rotate and select

Transparency effects

Contrary to popular belief, transparent objects casting images onto surfaces are easy to produce and take relatively little time to render.

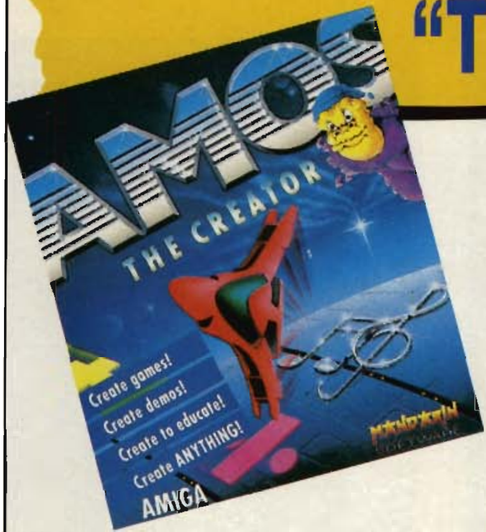
Apply these settings to your mapped image (again just a DPaint picture) and results similar to the picture shown can be achieved:

Brilliancy – 100
Transparency –100
Speed of Light – 100
Colour and Clip – highlighted
Both Gradient buttons - highlighted
Unshaded – highlighted

In this way, classic effects like stain-glass windows can be produced easily. The Unshaded option stops any shading being applied to the object or shape.

"The Amiga was made for AMOS"*

*K. Sumpter, AMOS user in Swindon

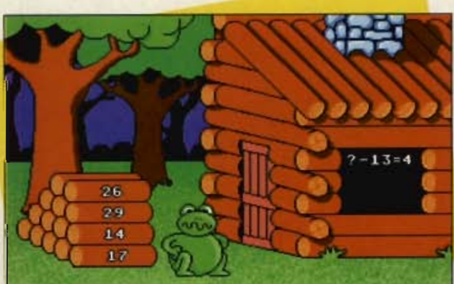


AMOS – The Creator is like nothing you've ever seen before on the Amiga. For the very first time you'll feel really in control of your computer, and able to harness its awesome power to impress yourself and your friends.

AMOS is not a false promise. When AMOS first came out, many Amiga users were sceptical that AMOS could do all that was promised – but these people are now ardent fans. There are now 45,000 AMOS users, and AMOS is still the biggest-selling productivity package for the Amiga, and can be found on the shelves of virtually every good software retailer.

It's so easy to create AMOS programs that almost every **public domain library** in this magazine now has AMOS titles in its collection. These include graphics demos, music demos, disc magazines, arcade-style games, puzzle games, databases, educational software – and lots more.

Many **commercial software packages** are also written in AMOS. In fact most educational publishers use AMOS, especially ourselves with the best-selling Fun School 3 and 4.



AMOS was the perfect choice to create Fun School 4 – the results are first class!

AMOS has also proved to be perfect for producing CDTV packages: The Complete Works of William Shakespeare, The Holy Bible, Mind Run I and II plus many others – all created using AMOS because of its versatility and ease of use.

What is AMOS?

AMOS is a powerful, easy-to-use programming language based around BASIC – the language which is taught in schools and colleges. AMOS contains more than 500 different English-like commands such as MUSIC, VOLUME, SAMPLE, GET FONT, ELLIPSE, RAINBOW, MENU BAR and CLOSE WORKBENCH – so you can create any result you want both quickly and easily.

AMOS comes with a clearly-written 300-page manual and more than 80 example programs. These will guide you towards creating your first program, making AMOS the ideal introduction to programming on your Amiga.

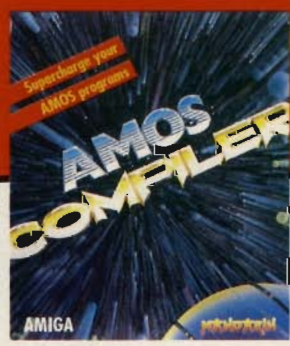
What AMOS owners have said:

"It's the best piece of software I've bought for the Amiga. Worth twice the price!"
– S Sweet, Herne Bay

"Without doubt the very best Basic available on the Amiga."
– Paul Feazey, Oxford

Unleash your creativity with AMOS – for just £49.99

Super-charge your AMOS programs



Now you can double the speed of your AMOS creations with the AMOS Compiler – in fact, some commands are up to five times faster! And using it couldn't be simpler – just two mouse clicks and you're away. The AMOS Compiler also includes a cruncher which will compress your programs to half their size – which has enabled AMOS users to get their work on magazine cover discs and earn them money.

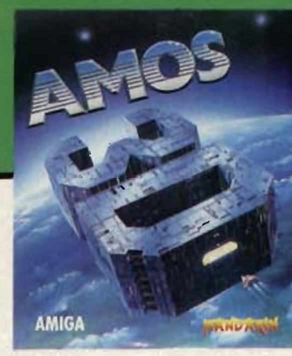


It takes just two clicks to compile your AMOS programs – it's that simple

"Compiling programs has never been so easy... Programs are turbocharged beyond recognition"
– Amiga Format

Make your AMOS programs race along – for only £29.99

Explore the world of virtual reality!



AMOS 3D will enable you to create any 3D object you like using the incredible Object Modeller – you can even add transparent walls. Then you can jump to AMOS and use the 46 new 3D commands to move, stretch and animate up to 20 objects at once in real time for amazing 3D creations!

AMOS 3D provides all the tools you need to create your very own 3D world.



The 3D Object Modeller gives you easy access to the world of virtual reality

"After a little more than a few hours you should be churning out 3D demos at a blistering rate"
– Amiga Format

Super-fast 3D at your fingertips – for just £34.99

Useful contacts:

AMOS Club
1 Lower Moor, Whiddon Valley, Barnstaple, North Devon EX32 8NW
Bi-monthly newsletter and technical support for a yearly membership fee.

AMOS Public Domain Library
25, Park Road, Wigan WN6 7AA
Telephone 0942 495261
More than 300 AMOS PD discs are available. Ring for a catalogue.

Creditcard order hotline – Tel. 051-357 2961. Alternatively send a cheque with your choice of products clearly indicated to Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB.

Europa House, Adlington Park, Macclesfield, Cheshire SK10 4NP. Telephone: 0625 859333

europress SOFTWARE



Transparency is capable of producing stained glass window effects

the centre of the loop as being 0, 0, –100. This should be the case as soon as you click in that window at the centre of the loop.

Rotate the loop 90 degrees by mouse control, or on clicking the centre point immediately press the colon/semicolon key on your keyboard. This brings up a requester which will already have 90 degrees as default.

Say OK to this and the loop will be rotated accurately. By using the same keypress with other actions such as sizing and so on, the requester will allow you to type in exact figures.

Now this is the crucial bit. Select from the menu Freeform Build Orthogonal Sweep. At this point press the asterisk key – the one to the far right of the keyboard in the numeric keypad.

A message on the menu bar will appear saying "Select Object for Point Definition". Assuming that Loop is still highlighted, click on OK in the requester.

A message will appear in the menu bar saying "Define Sweeping Curve" – again press the asterisk key. This will bring up another message in the menu bar, "Define Sweeping Curve". Select Curve Object in the hierarchy and click on OK.

The programme will then automatically extrude the loop along the spiral path and produce a hollow, perfect spiral tube. You will notice that in the hierarchy table a new object appears called mesh.

You can delete the loop object, as it's not needed. Now the mesh can be made smoother and more detailed by using the Freeform Modify Remap option from the menu. By doubling the figures in the requester, a very smooth object can be produced automatically.

Unless you have an accelerator or lots of memory, be careful with any kind of mesh object as the Real3D program is optimised for solid geometry (see "Reflectance" box). The curve which is left can now be used as a orbit or movement path down the tube. Parallel curves can be used to make wavy flags and – by using the point editing tools – reshaped or bent. Thus you can use the morphing facility within the program to create animations of rippling flags.

Meshes can be made by using the Freeform Build Orthogonal Sweep, and points pulled and shaped with the variety of bending options available.

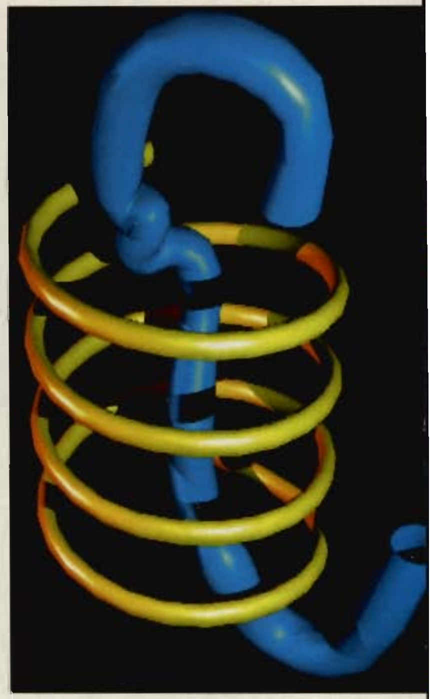
An even quicker way to produce Terrain is in DPaint. Use the Airbrush tool to spray an area in different shades of grey (make sure the area is small and use lo-res, 16 colours), save this as a brush and use the Pixel2 tool in Real. Select the brush from the menu and define the size required.

The program will look at colour values and the number of pixels and make a mesh that can look just like a mountain range.

Careful use of this function is required if you have a small amount of memory. The Freeform Modify Remap/Smoothen options allow you to produce mesh objects that will be suitable to use by increasing or decreasing the number of points and polygons.

It is possible to make effective land masses with meshes and texture mapping and fly the observer around without exacting large memory overheads.

Essentially, by using curves and loops, almost any kind of organic object can be created.



Real 3D's Sweep and Exude functions in action

Rendering options

There is no need to always render your images full screen size in order to check characteristics. Just type in smaller units in the Width and Height parameters.

For example, 320 x 256 could be 160 x 128 or even 80 x 64. Animations can be rendered and saved in this size far quicker and previewed faster before committing yourself to the final render. The same applies with rendering to a 24-bit graphics card.

When using anti-aliasing for standard Amiga modes, never use more than four levels – level two is, in most cases, quite adequate, and affects the rendering time slightly.

Also, when rendering in 24-bit the same applies – level four is quite fine, and applying any more considerably increases rendering time for little image improvement.

Likewise with the recursion depth. Level three is fine for most imaging, maybe increasing to five or six if overlapping glass objects are used or a more detailed reflective surface is required.

Use anti-aliasing and recursion depth with extreme caution. A 68030/68882 combination can be made to look like a bog standard 68000 setup with indiscrete use of these parameters.

Colour grading and clip mapping

Real has a very easy and fast method of producing smooth colour grades, by using the Material Requester.

Again, use DPaint to make a brush of two different coloured pixels, or one pixel and a background colour – lo-res is quite adequate, as only the colour information is looked at. Make this into a material in Real, and highlight both Gradient buttons.

By using different combinations of Mapping and Tiling and applying the resultant texture to your objects, very smooth colour gradations will be produced which are fantastic in 24-bit.

This technique can, for instance, be used to make a graded sky backdrop by mapping a spread of two blues onto a rectangle or completely around a large sphere.

Probably one of the most powerful and unusual texture mapping methods Real offers is called Clip Mapping. This takes the colour information or picture area and removes any of the object's surface that the image is mapped onto that is not represented by the area of the image.

If you clip-mapped a small square image onto a sphere, then all that you would see is the square image in space, but with a curvature that is representative of the curvature of the sphere.

Also, by specifying the No-Colour Zero parameter, any part of the image that has the background colour will also be removed.

Take a picture of a weathercock. All the image need consist of is a series of rectangles with brushes of "text" produced in DPaint and clip-mapped with No-Colour Zero selected.

This method od is great to make seemingly complex images that require little memory and are generally quick to render. They also exhibit any properties you define for your material like shininess, specularity and even the shapes will cast shadows.

The possibilities here are tremendous in that you can make animations similar to the type you might make in DPaint but with the true "3D – Dimensionality" that Real offers. The only drawback is that 24-bit images will not clip-map with No-Colour Zero.

Reflectance

By making a large hollow sphere and applying a texture to the surface, a very convincing Environment Map can be achieved. Use the Info menu option to set the spheres attributes to Scene and Hollow, and place a reflective object in the centre of the sphere.

The sphere's texture will only be seen in the surface of the object and nowhere else in the background.

A final point here, Real3D was really optimised to handle its own kind of solid modelling and the mesh objects included due to demand. Because of this, Real does not render particularly fast when using mesh-type objects or surfaces.

However, when v2 finally reaches these shores (and this could be sometime this year), the proper implementation of solid modelling and mesh-type objects among other innovations should promise a program equal to, if not better than, anything that exists for the Amiga for 3D animation purposes.

FIRST CHOICE

LEEDS TEL: 0532 637988

FAX: 0532 637689

NEW OPENING HOURS

OPEN MON - SAT 9.30AM-5.30PM
SUNDAY OPENING 11.00AM-3.00PM
THURSDAY NIGHT LATE 9.30AM-7.30PM

WEST YORKSHIRES PREMIERE AMIGA AND ATARI COMPUTER STORE

AUTHORISED DEALERS FOR STAR, CITIZEN, COMMODORE, ACORN, ROMBO & PHOENIX

THE AMIGA A500 PLUS CARTOON CLASSICS

Now complete with:
* One Mb of chip RAM expandible to 10 Mb of RAM in total
* The new Kickstart 2.04
* Workbench 2.04
* Built in battery backed real time clock
* New improved user friendly manuals

This pack also comes with **Lemmings**, (the only game ever to get a 100% rating!) **The Simpsons, Captain Planet** and **Deluxe Paint 3** the incredible paint and animation package plus mouse and modulator

now only £339.99!!
or £374.99 for 2Mb version

The *New* AMIGA A600

Commodore's new computer/games machine.Built in keyboard and compact in size the A600 will take "Smart Cards". The A600 comes with **12 month on site warranty**, workbench 2.05, **Dpaint III and Lemmings.**

now only £359.99

The *New* AMIGA A600HD

Same spec as the A600 but with a built in 20 meg hard disk. We shall be offering larger hard drive upgrades for the A600. Please ring for details and prices.

now only £459.99

THE AMIGA 1500 AND 2000 PLUS

The New AMIGA 2000 Plus Base pack

now complete with the latest 2.04 Kickstart chip and Workbench 2.04 !!

The 2000 Base pack is the ideal upgrade machine for those wanting to upgrade from their present Amiga 500

only £529.99

Amiga 1500 Plus Business & Entertainment Software pack

The same spec. as the base pack but with Deluxe Paint 3, Platinum Works (the best integrated package available for the Amiga), Home Accounts, Puzznic, Elf, Toki plus the latest Amiga Format Tips book (2.04 compatible) and Joystick.

now only £549.99
or £769.99

with 1085 SDI colour monitor (UK Spec.)

THE AMIGA A500 & 1500/2000 PLUS *DELUXE* SERIES

The AMIGA 500 *Deluxe*

is an uprated version of the A500 Plus with the Phoenix ROM sharer and 1.3 chip because some older software will not run on the A500 Plus. The A500 Deluxe has been developed so you can choose to run either Kickstart 1.3 or 2.04 **making incompatibility problems a thing of the past !** The Deluxe also Comes complete with the Cartoon Classics software pack.

only £414.99 or £459.99
for 2 Mb version

The Amiga 1500 *Deluxe* is an advanced version of the standard AMIGA 1500 Plus

incorporating the famous Phoenix ROM sharer and 1.3 Kickstart ROM chip. As with the A500 Deluxe, this enables you to switch between the old and new operating system to accommodate older software that can only run on the 1.3 operating system.

only £559.99 for base pack version or
£609.99 for the 1500 software pack version

GVP HARD DRIVES AND ACCELERATORS

AMIGA 1500/2000 Hard Drives

Impact Series II HC8+ Control card only	£134.99
Impact Series II HC8+ with 52Mb Hard Drive	£279.99
Impact Series II HC8+ with 120Mb Hard Drive	£419.99
Impact Series II HC8+ with 240Mb Hard drive	£639.99
Impact Series II HC8+ with 420Mb Hard drive	£1169.99

AMIGA 1500/2000 Accelerator Cards

G-Force 030-25MHz with 1Mb 32 bit RAM	£549.99
G-Force 030-40MHz with 4Mb 32 bit RAM	£899.99
G-Force 030-50MHz with 4Mb 32 bit RAM	£1269.99
G-Force 040-28MHz with 2Mb 32 bit RAM	£1699.99

AMIGA A500 HARD DRIVES

GVP Series II HD8+ 52Mb	£354.99
GVP Series II HD8+ 105Mb	£469.99
GVP Series II HD8+ 240Mb	£734.99

GVP Combo Accelerator Series for the AMIGA A500

A530 Combi 40MHz with 52Mb Hard Drive	£699.99
A530 Combo 40MHz with 120Mb Hard Drive	£849.99
A530 Combo 40MHz with 240Mb Hard Drive	£1039.99
68882 Co-Processor for A530	£234.99

GVP memory RAM modules

Series II RAM 8 RAM card for AMIGA 1500/2000 with 2Mb	£149.99
32 bit 60ns 1Mb SIMM for Accelerator cards	£64.99
32 bit 60ns 4Mb SIMM for Accelerator cards	£179.99

MONITORS

All our monitors are UK spec

All monitors come complete with a free Amiga lead

WARNING: Before you purchase a monitor make sure it has a full UK specification. You might be buying what you think is a similar monitor at a lower price but it is likely to be a "GREY" import. These monitors do not comply with British safety standards and are not covered by an official warranty

Protar Stereo colour monitor

This monitor uses the same tube as the Philips 8833 MK2 and has a similar specification. The Protar comes with a **full 12 month replacement guarantee.** This must be the best value medium res. monitor on the market. **Amiga cable included. Tilt and swivel stand only £11.99 when purchased with this monitor. Cover only £5.99**

only £195.99 UK Spec.

Commodore 1085 SDI Stereo Colour monitor

The perfect complement to your Amiga system. This Colour stereo monitor features .51 dot pitch resolution and green screen facility. **Amiga cable included. Tilt and swivel stand only £11.99 when purchased with this monitor Cover for monitor only £5.99**

only £225.99 UK Spec.

Philips CM8833 MK2 stereo colour monitor

Colour stereo monitor. 600*285 line resolution, green screen facility, **one years on site maintenance, cable for Amiga included. Tilt and swivel stand only £11.99 when purchased with monitor. Cover only £5.99**

only £234.99 UK Spec.
with F19 Flight Simulator

Philips Brilliance SVGA Colour monitor with overscan facility

The Brilliance monitor has a high quality Super VGA resolution ideal for making your AMIGA into a professional system. Icludes overscan facility, .28 dot pitch.and tilt/swivel stand. Monitor cover only £5.99 if purchased at the same time

1500 VERSION £399.99
with Flicker Free Video card
A500 VERSION £499.99

Goldstar remote control TV/monitor

superior to a standard TV set with full remote control

now only £179.99

Commodore 1960 multisync

only £436.99

THE COMPLETE COLOUR SOLUTION

As official dealers for Rombo, we are able to offer this excellent package at a great price. The complete colour solution comes with RGB splitter, Vidi Amiga, Vidi Chrome, power supply and Photon Paint.

now only £99.99

VIDI AMIGA

High quality digitizing. Inc Vidi chrome colourising software

now only £59.99

RGB SPLITTER

Enables you to Colour Digitise in a second. Replaces red green blue filter set. Can be used with Digi view or Rombo products

now only £44.99

TAKE 2

Designed to be used in with a digitiser or as a stand alone program, this is latest animation package for the Amiga from Rombo. Features include load and save from D. Paint animations and IFF files. Supports HAM graphics.

only £69.99

MEGAMIX MASTER

This is a low cost 8 bit, high spec. sampler that plugs into your printer port. Special effects include echo that can be added in real time, fully multitasking and easy to use.

only £29.99

THE MICROBOTICS ACCELERATOR BOARDS

The VXL is an advanced 68030 accelerator for the Amiga 500/1500/2000 with space for an optional co-processor (CP)

VXL30 25Mhz EC...........only £239.99
VXL 30 40Mhz EC..........only £369.99
68881 co-pro for above....only £79.99

The VXL accelerator boards can also accept32 bit RAM to optimise performance. The superfast 32 bit RAM comes as a 2 MB or 8 Mb daughter board for the VXL.

2 Mb of 32 Bit RAM (60ns)..only £214.99
8 Mb of 32 Bit RAM (60ns)..only £419.99

PANDAAL HAND SCANNER

On test this scanner has proved to be the easiest and most effective scanner that we have used to date having compared it to most of the other major hand scanners on the market. We are able to offer this high quality scanner at a fraction of the normal cost. Complete with the latest improved version of Daata-scan software this scanner is able to pick out text and graphics at up to 400 d.p.i in real time. Daata-scan enables you to easily manipulate the image. Scans in real time up to 64 grey scales. Ideal for desk top publishing and presentation.

SPECIAL OFFER

now only £104.99 or £119.99 with 2 way parallel switcher box

SOFTWARE

FINAL COPY *new version 1.3!!*

Now faster and easier to use, this superb word publisher from the writers of PenPal. With built in outline fonts for top quality output, full graphics import capability (IFF and HAM). Features include Thesaurus, spelling checker and detector, automatic hyphenation, insert date, time, and page number, scale graphics to any size, crop graphics, multiple columns layout, magnified and reduced page view, full post script support and much more.

Highly Recommended **only £49.99**

or £105.99 with Cumana 3.5" external drive

PLATINUM WORKS PLUS HOME ACCOUNTS !!

As recommended by Commodore we believe this to be one of the best all round integrated business packages on the Amiga. It comes with Platinum Scribble w/p, spell checker, thesaurus, Analyse (a "Lotus 123" compatible spreadsheet with 3D graphics), a database, sideways printing utility and communications software plus the best selling Digita Home Accounts

only £44.99!!

DIGI-VIEW GOLD MEDIA SYSTEM

The new complete graphics creation presentation package for your Amiga. Comes complete with the famous Digi-View Gold, Digi-Paint and Elan Performer

only £129.99

WORDWORTH V1.1

The latest version of this highly acclaimed WYSIWYG word publisher. Comes with multiple fonts, powerful thesaurus, large spellchecker, speech synthesis

only £72.99

PENPAL 1.4

This best selling word publisher incorporates many features found only in a desk top publisher. Also includes an easy to use database.

now only £53.99

PAGESTREAM 2.2

The latest version of this powerful DTP package that we recommend. Better than alot of DTP packages on a PC and better than most on a Mac

only £129.99

New INTERSPREAD

This new spreadsheet is highly recommendedat at a bargain price. Features include graphics presentation, and advanced macros

only £24.99

New QUARTERBACK V5

New, completely re-written version of this Fast and Famous hard disk backup utility. Supports up to 4 disk drives, variable compression options and full Macro and AREXX support. The Best!

only £39.99

AMIGA RELEASE 2 UPGRADE KIT

Complete with:

* Kickstart 2.04 CHIP
* Workbench 2.04, Install, Fonts and Extras disks
* full Commodore manual set

only £79.99

3D Text Animate........now only £9.99
Aegis Sonix....................£39.99
Art Department Pro 2.1.....£109.99
Amiga Vision...................£39.99
Amos Creator...................£34.99
Amos Compiler..................£22.99
Amos 3D........................£27.99
Audio Engineer................£169.99
Audio Master version 4.........£39.99
BBC Emulator...................£39.99
Broadcast Titler.........only£149.99
CrossDos.......................£19.99
Deluxe Music Costruction Set..£54.99
Deluxe Paint 2...now only £4.99
Deluxe Paint 3.....now only £12.99
Deluxe Paint 4.....now only £57.99
Easy AMOS......................£26.99
EXPERT DRAW............ONLY £49.99
EXPERT 4D JR........ONLY £37.99
Flexidump printer utility.......£31.99
DEVPAC 3.......................£57.99
Distant Suns...................£34.99
Final Accounts.................£29.99
GB Route Planner...............£29.99
Gold Disk Office...............£64.99
HiSoft Basic...................£54.99
Home Accounts 2................£37.99
Imagine V2....................£189.99
Opus Directory.................£29.99
Pagesetter 2 DTP...............£42.99
Pixmate........................£39.99
Platinum Scribble w/p inc spell checker/thesaurus...........now only £29.99
Pro Page professional V3 DTP..£149.99
Protext 4.3 W/P.................now only £39.99
Pro Video Plus................£139.99
Quarterback Tools ....only £44.99
Sequencer One..................£74.99
Smooth Talker..................£20.99
TURBO PRINT....................£49.99
Vista..........................£29.99
Vista Pro 2 (2 Mb required)....£69.99
Walt Disney Animator...........£64.99
XCAD 3D.......................£189.99
Xcopy Pro inc . hardware.....£33.99

PERIPHERALS

AMIGA SOUND ENHANCER

By Omega Projects this sound enhancer will improve any sound that is played through your Amiga. Hear the Amiga's sound like you've never heard it before!

only £32.99

The Zy-Fi Stereo System

This is a powerful 3 way speaker system with built in stereo amplifier. It will plug into an Atari STE, Commodore Amiga or Acorn Archimedes.

The speakers are optimised with reflex ported cabinets. The 3 way system has bass, mid range and treble drivers.

Complete with its own power supply the Zy-Fi system can also be powered by batteries

only £36.99

GENLOCKS

Rocgen Genlock

with built in mode switch box and auto pass thru function, the Rocgen represents excellent value for money

only 99.99

Rocgen Plus

with all the features of the standard Rocgen. Also includes dual control for overlay and keyhole effects, extra RGB pass thru allowing real time graph editing.

only £129.99

CHIPS

Kickstart 1.3...£29.99
Kickstart 2.04.£39.99
Fatter Agnes..£30.99
Super Denese.£30.99

256 by 4 DRAM (DILs)

ideal for A590 & Supra Hard drives plus many other Amiga RAM applications

QTY
4+ (512K)..now only £3.59
8+ (1Mb)....now only £3.39
16+ (2Mb)..now only £3.09

1 Mb by 8 or 9 SIMM boards

as used in GVP and Cortex boards

now only £29.99

4 Mb by 9 Simms (for GVP)

only £114.99 each

1 Mb by 4 ZIPS

as used in Supra boards. 2 1 Mb by 4 ZIPS equal 1 Mb

only £38.99 per Mb

2 Way Parallel port sharer inc. cable

Many peripherals such as printers and scanners share the Amiga parallel port causing the user to have to swap between the two. Solve this problem with the 2 way sharer box

only £17.99

ROCTEC MOUSE

This is an excellent high quality mouse for the Amiga. Fully micro-switched mouse. Excellent value and highly recommended.

only £13.99
or £16.99 with mouse mat & holder

NAKSHA MOUSE

This famous and best selling mouse comes complete with Operation Stealth, mouse mat, holder and 2 year warrenty. Features include 290 DPI resolution

only £24.99

DISKS

All Phoenix 3.5" disks are GUARANTEED FOR A LIFETIME and are CERTIFIED 100% ERROR FREE double sided, double density disks are of the highest quality in magnetic media and are extensively used by duplicating houses

QTY	*Phoenix Bulk*	*SONY BRANDED*
10	£4.99	£6.99
30	£14.29	£17.99
50	£21.99	£28.99
100	£39.99	£54.99
200	£72.99	£99.99
500	£169.99	n/a
1000	£339.99	n/a

Sony Branded disks come complete with labels
Disk Labels....500.........now only £6.99
Disk Labels...1000........now only £9.99

SUPRA RAM

The ultimate Amiga A500 expansion. Take your A500 up to 9 Mb (10 Mb with the A500 Plus). Fits onto the side expansion port Auto configures with no software patching.

Please note that when 256*4 ZIPS are used, the Supra RAM can only be populated to a maximum of 2 Mb. If you use this configuration and want to further increase your capacity you must replace the 256*4 ZIPS with 1 Mb by 4 ZIPS.

8Mb pop to 1Mb..............................£94.99
8Mb pop to 2 Mb using 256*4zips..... £119.99
8Mb pop to 2 Mb using 1Mb*4 zips.. £149.99
8Mb pop to 4 Mb............................£199.99
8Mb pop to 8 Mb............................£299.99

512K RAM EXPANSION

Top quality RAM expansions for the A500 complete with battery backed clock and on/off switch. This RAM expansion will not in any way invalidate your Amiga warranty!! **now only £24.99**

MAIL ORDER ? WHY *FIRST CHOICE* ?

Order by telephone quoting your credit card number. If paying by cheque please make payable to *FIRST CHOICE*. In any correspondance please quote a contact phone number and post code. Allow 5 working days for cheque clearence

Mail order Hotline 6 LINES

0532 637988

Prices are subject to change without notice. E&OE.

* All prices include VAT and Standard Delivery
* All hardware/computers are genuine UK spec.
* Free Fast Standard 4 to 7 day Delivery
* Guaranteed 2 to 3 day Delivery only £2.00
* Guaranteed Next Day Delivery only £4.50
* Open seven days a week for your convenience

PLEASE ADDRESS ALL CORRESPONDENCE TO:

DEPT AC, UNIT 8, ARMLEY PARK COURT, OFF CECIL STREET, LEEDS, LS12 2AE

ABSOLUTE beginners

PART 5

Stevie Kennedy sorts out printing and printer drivers

First of all an apology to anyone feeling miffed or confused by the last couple of columns. My first mistake was to neglect to tell you about icon.library, without which your auto-booting disks wouldn't auto-boot.

This was rectified last month but, sadly, senility struck again and in telling you all to:

```
COPY LIBS:ICON.LIBRARY TO MYDISK:LIBS
```

I left out the all-important fact that there was, as yet, no LIBS directory on MyDisk. This just goes to prove that even someone charged with putting CoverDisks together and writing beginners' columns for over a year can fall foul of the complexities of AmigaDOS and make basic mistakes.

You should, of course, have typed the command:

```
MAKEDIR MYDISK:LIBS
```

before trying to copy icon.library to your disk.

On with the show. This month we'll be taking a look at the Workbench printer device and how to set it up so that we can send text files to the printer without having to use a text editor or wordprocessor.

As usual, AmigaDOS's structure means that there are several files you will need in order to set up the device, so here's a list of them:

- C:TYPE
- DEVS:PRINTER.DEVICE
- DEVS:PARALLEL.DEVICE
- DEVS:SERIAL.DEVICE
- DEVS:PRINTERS/GENERIC
- L:PORT-HANDLER

Type is just the C: command used to send a file to the screen or printer, printer.device controls all access to the printer, and parallel.device and serial.device control the parallel and serial ports at the rear of the Amiga into one of which your printer will be plugged.

Port-handler takes care of the interface for the PRT:, PAR: and SER: devices, which is what AmigaDOS calls the printer device, parallel and serial ports.

The other file we've included in our list is the printer driver, generic. As its name suggests, this is a very simple printer driver designed to work with more or less any printer attached to your machine, and should always be present for the printer.device to work.

You can add as many custom printer drivers as you like at a later date, but generic should always be in there too.

So what's a printer driver? These small programs are found in the printers subdirectory of the DEVS: drawer and have contained in their code all the information necessary for AmigaDOS to recognise a specific printer and cater for its idiosyncrasies or special features.

Individual printer drivers are available for most popular printers and the correct driver for your printer should always be copied to the printers subdirectory.

As usual, the instructions in this column will assume that you're working with a single floppy Amiga, necessitating a lot of copying to RAM: and disk swapping. The steps taken to set up a printer.device are identical whether you own Workbench 1.3 or 2.04, so it doesn't matter whether or not you're using a Plus model.

To begin, boot from Workbench and open Shell. Now type the following commands to chuck everything into RAM:

```
COPY COPY TO RAM:
COPY CD TO RAM: (WB1.3 USERS ONLY!)
COPY MAKEDIR TO RAM:
COPY DEVS:PRINTERS/GENERIC TO RAM:
COPY C:TYPE TO RAM:
COPY DEVS:PRINTER.DEVICE TO RAM:
COPY DEVS:PARALLEL.DEVICE TO RAM:
COPY DEVS:SERIAL.DEVICE TO RAM:
COPY L:PORT-HANDLER TO RAM:
```

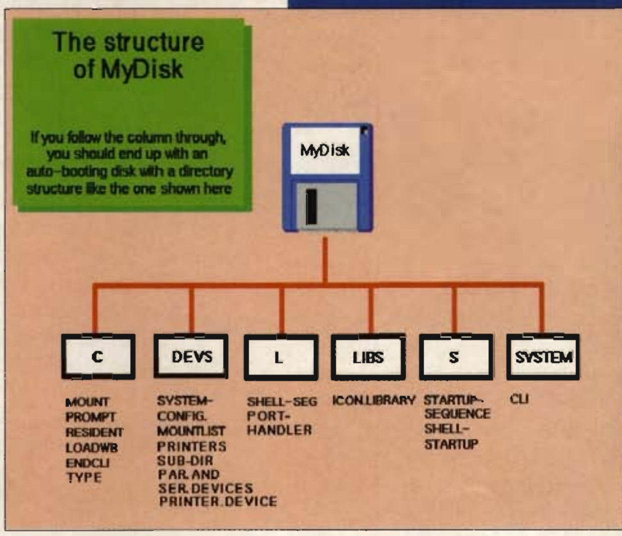
Phew! Now CD RAM: and put MyDisk in the internal drive. If you have a second drive, just pop MyDisk in there, then everyone should type the commands:

```
MAKEDIR MYDISK:DEVS/PRINTERS
COPY GENERIC TO MYDISK:DEVS/PRINTERS
COPY TYPE TO MYDISK:C
COPY PORT-HANDLER TO MYDISK:L
COPY PRINTER.DEVICE TO MYDISK:DEVS
COPY PARALLEL.DEVICE TO MYDISK:DEVS
COPY SERIAL.DEVICE TO MYDISK:DEVS
```

You now have almost all the files necessary to enable printing from MyDisk, and we could test this by using the Type command.

If we did, however, we would more than likely fall foul of one of the banes of beginners with printers – the printer driver nightmare.

Cast your mind back a couple of columns when we were first giving birth to MyDisk. The first file we copied to MyDisk:DEVS was called system-configuration, and it is this file which contains the information about which printer driver is currently selected. The printer driver which was selected on your original Workbench disk – from where we copied system-configuration in the first place – is the driver MyDisk, will look for when asked to print something, and if it was anything other than generic we'll have problems.



Beginning to get crowded in there, isn't it?

To check your printer driver, put Workbench back in the internal drive and open the Prefs drawer by double clicking on it. Workbench 1.3 owners should now double click on the Preferences program and then the Change Printer gadget.

Workbench 2.04 users (everyone with a Plus model) will have to double click on the Printer icon.

For all users, the selected printer driver will be the one which is highlighted, so make a note of its name and quit out of Preferences. Now open Shell again and – let's say the selected driver was EpsonX – type:

```
COPY DEVS:PRINTERS/EPSONX TO
MYDISK:DEVS/PRINTERS
```

If your selected driver was other than EpsonX, just substitute its name in place of EpsonX in the above command line.

Once the copy is complete, MyDisk should have the correct printer driver installed and should be ready to do some printing. It's time to boot from MyDisk to test this, so insert it in the internal drive and carry out a warm reboot (Ctrl-Amiga-Amiga).

If you followed the last two columns, and survived my wee mistakes – which I almost didn't! – then MyDisk should boot up with a Shell ready to be opened and used. Once the disk has booted, double click on its icon to reveal the Shell icon, then double click on that.

If you have a printer attached, type the following command:

```
TYPE TO PRT: S:SHELL-STARTUP
```

and if you don't yet have a printer, just type:

```
TYPE S:SHELL-STARTUP
```

As long as the printer is online and has paper in it, printer owners should see the shell-startup (remember this from last month?) printed on paper, and non-printer owners will see it listed in the Shell window.

Congratulations! You have successfully created an auto-booting disk and enabled our first practical project. You have already advanced much further into the Amiga's ➤

This month's jargon

Console

This is the name given to the Amiga screen in which you are issuing commands and receiving the output. In other words, the console can be thought of as another name for the Shell window.

Escape codes

Used in printing to control printer effects, escape codes are a bit of an anachronism, though still useful. In conjunction with the Echo command, escape codes can produce text effects to brighten up anything from a full letter to a simple disk intro as you'll find in the boot sequence of every *Amiga Computing* CoverDisk.

practical side than the vast majority of owners, and there's a lot more to come.

To experiment further with the Type command, try for a second time the command line we just typed in, adding the word Hex at the end so that the line looks like this:

```
Type TO PRT: S:SHELL-STARTUP HEX
```

Notice the difference? The file is printed out, but this time the text part has been squeezed into a single column on the right of the screen and the left hand two-thirds are filled with numbers. This is a hexadecimal (hex for short) listing of the file and contains the Ascii codes for each letter or character in the text.

This won't mean much to you at present, but it is a good example of how much flexibility you will find in the simplest AmigaDOS operations if you delve a bit.

You can examine the hex contents of any file on MyDisk by using the Type command in this way, but unless you intend to become a machine code programmer you'll probably never have to do this.

One practical use of the Hex option is when you suspect you have a virus but can't be sure. If a file on your disk seems somewhat suspicious (it wasn't there before or has a strange name such as "*") you can use Type with the Hex option to carry out a very crude test on the file's contents.

Certain viruses leave files on your disk containing Ascii text within the code which can be read using Type. If a file is troubling you, Type it to the screen using the Hex option and check for insolent or smug messages from the virus author inside the code.

Usually, you won't find them, but in the case of new viruses which are undetectable with existing virus checkers, it is this sort of basic detective work which sometimes saves the day.

A more common use for Type is its numbering ability. Suppose you have an example Basic or C program on disk that you'd like to get to grips with as you begin to learn the language.

Most modern programming languages don't use line numbers, so any listing you printed out could be quite difficult to follow.

If used with the Number option, Type will add a line number to every line in the file, making life a lot easier. Try typing the following command:

```
TYPE TO PRT: S:SHELL-STARTUP NUMBER
```

The output you'll get will be identical to the original listing of this file except that every line is now numbered.

So much for Type. What if you want to use a PD program for viewing and printing text files? What if the file has been crunched (compressed so that it uses less disk space) so that when you try to Type it to the printer you get a lot of garbage on paper?

In these cases, you need a program such as MuchMore_PP (MMPP) which we use on every CoverDisk to view and print text files. All you have to do, assuming you have this month's CoverDisk, is copy it to MyDisk using the command:

```
COPY COVERDISK33:C/MMPP TO MYDISK:C
```

and, after a couple of disk swaps, the 11k program will be copied across to your disk.

Now, before we attempt to use MMPP, a couple of things have to be added. This program is really quite complex, as it will load and de-crunch powerpacked (crunched) files, so it needs to have access to the powerpacker.library.

Luckily, this can be found on every CoverDisk. Also, as it uses a file requester to choose the file to be viewed, it needs to be able to find arp.library, which contains the file requester.

To copy these files from this month's CoverDisk across to MyDisk, type the commands:

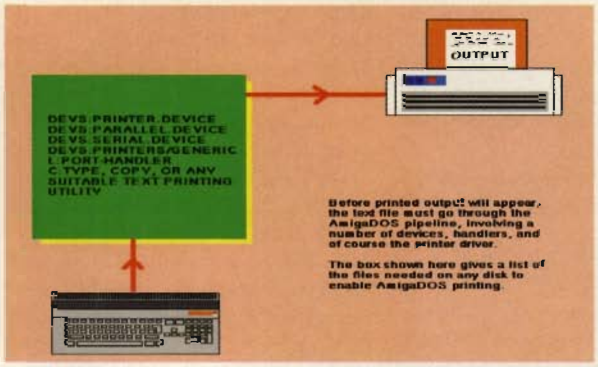
```
COPY COVERDISK33:LIBS/POWERPACKER.LIBRARY TO
MYDISK:LIBS
COPY COVERDISK33:LIBS/ARP.LIBRARY TO
MYDISK:LIBS
```

If you have an external floppy, put the CoverDisk in there to save disk swaps.

If you now want to view and then print a document you would first type MMPP to summon the file requester, then select your file, scroll through it in MMPP, and finally print it by holding down the Alt-Shift-O (the letter, not the number) combination.

Fine, you may be thinking, but what if I want something other than a straightforward Ascii file listing? You'll have noticed that using Type and MMPP in the way we have, the text files as printed are fairly bland. However, there are a couple of ways, even using basic Workbench commands, that you can spruce up a text file.

Let's reboot with our Workbench disk and take another look at the Preferences program. As before, Workbench 1.3 owners should double click on the Prefs drawer, then the Prefs icon, and Workbench 2.04 users should open the Prefs drawer and double click on the Printer icon. In the Preferences program it is possible to set the length of the page your text will print on, the left and right margins, pitch in characters per inch (the higher the number the smaller the characters will appear), spacing in lines per inch (the lower the number the more space there will be between lines), print quality (draft or letter), and the paper type (single sheet or continuous feed).



There are many files sitting between your keyboard and your printer

While these controls don't give you anywhere near as much control over the text as a wordprocessor would, they at least make it possible for the user to tweak his or her preferences until they best suit their printer and personal taste.

There are no controls for underline, italics, and so on, but these too, you may be surprised to learn, are available when you first write your text.

On this page, you'll see a box containing a list of the text effects available under AmigaDOS. These are all turned on by first pressing the Escape key then a few control characters, and turned off after use using the null code (see box).

To try these out, you can't actually use the ED text editor supplied with Workbench because whenever you press the Escape key ED goes into extended mode and expects a command to be issued.

To create a file containing Escape codes for text effects, therefore, you'll have to use a shareware text editor, such as QED from the *Amiga Computing* WorkStation and GraphicStation disks, or type directly to the printer using redirection.

Redirection takes place when the output from a command is forced to a device other than the default device, which is normally the console (another name for the Shell window). For example, if you typed:

```
ECHO "Esc[1M Hello!"
```

you'd see the word "Hello!" appear in bold type in your Shell window. Remember! When you see the word "Esc", I mean you to press the Escape key rather than type the word out. Now try this:

```
ECHO >PRT: "Esc[1M Hello!"
```

Surprised? The word "Hello!" appears not in your Shell window but on paper. The redirection arrow has forced the Amiga to send the word, complete with the escape code for bold type, to your printer where, as long as the printer is online and fed with paper, it will be printed. We'll be taking another, more in-depth, look at redirection as the series continues, but for now owners of printers can have fun printing stuff to paper from the Shell window.

The rest of us can try this interesting experiment. Type the commands:

```
ECHO >RAM:MYFILE "WHAT'S THIS DOING IN HERE?"
ED RAM:MYFILE
```

Next month we'll start to fill up the C: directory with the most useful AmigaDOS commands and take a long hard look at what they do. AC

This month's commands

Just one this month. The Type command is used to output the contents of a file for inspection by the user. By default, it sends the output to your Shell window, but can be made to send it to the printer for printing if so desired. Syntax is of the form:

```
TYPE {Filename} [TO] [DEVICE]
```

Its parameter is the filename and its options are Hex or Number, the former printing a hexadecimal representation along with any text, the second printing the text along with line numbers.

Text effects

The following is a list of all the text effects available through the use of escape codes, any of which can be used for script files which appear in the Shell window or for output directed to the printer.

Please note that where you see the word Esc, you should press the Escape key on your keyboard rather than type in the whole word.

Esc[0m	Turn off all effects
Esc[1m	Bold text
Esc[2m	Make text colour 2
Esc[3m	Italicised text
Esc[30m	Make text colour 0
Esc[31m	Make text colour 1
Esc[32m	Make text colour 2
Esc[33m	Make text colour 3
Esc[4m	Underlined text
Esc[40m	Make background colour 0
Esc[41m	Make background colour 1
Esc[42m	Make background colour 2
Esc[43m	Make background colour 3
Esc[7m	Inverted text
Esc[8m	Make text invisible
Esc[nu	Make text window n characters wide
Esc[nt	Make text window n lines high
Esc[nx	Set left border of window to n pixels
Esc[ny	Set distance to top of window as n pixels

NB: Workbench 1.3 colours are: 0 – blue, 1 – black, 2 – white, 3 – orange. Workbench 2.04 colours are: 0 – grey, 1 – white, 2 – black, 3 – blue.

CITIZEN — DOT MATRIX, INK JET AND NOTEBOOK PRINTERS

ALWAYS A GOOD IDEA

Silica presents some great offers on the award winning range of high quality matrix printers from Citizen. Each Citizen printer is built in the UK to exacting standards, ensuring superb reliability and output. Our confidence in Citizen's quality is such that we are pleased to include a 2 year guarantee with every printer. Plus, if you buy a Citizen printer (not inkjet) from us, we will give you the Silica Printer Starter Kit (worth £29.38), *FREE OF CHARGE!*

FREE DELIVERY
Next Day - Anywhere in the UK mainland

FREE STARTER KIT
Worth £29.38 - With every Citizen printer (excluding inkjet) from Silica.

2 YEAR WARRANTY
Silica offer a 2 year warranty (including the printer head) with every Citizen printer from Silica.

WINDOWS 3.0
Free Windows 3.0 driver. Included with the Silica Starter Kit.

FREE COLOUR KIT
With every Prodot 9 and Swift 24e printer.

FREE HELPLINE
Technical support helpline open during office hours.

MADE IN THE UK
Citizen printers are manufactured to high standards.

LOW PRICE 9 PIN PRINTER



144 CPS — 80 COLUMN

- *Citizen 120D+ - 9 pin - 80 column*
- *144cps Draft, 30cps NLQ*
- *4K Printer Buffer + 2 Fonts*
- *Parallel or Serial Interface*
- *Graphics Resolution: 240 x 240dpi*
- *Epson and IBM Emulation*
- *Pull tractor & bottom feed*
- *FREE Silica Printer Starter Kit*

RRP £199
SILICA STARTER KIT £25
TOTAL VALUE: £224
SAVING: £109
SILICA PRICE: £115

£115
+VAT= £135.13 ref: PRI 2120

The Citizen 120D printer comes supplied with a parallel interface as standard. If you require a serial interface instead, please state ref: PRI 2125 when placing your order with Silica.

9 PIN PRINTERS



300 CPS — 80 COLUMN

- *Citizen Prodot 9 - 9 pin - 80 column*
- *300cps Draft, 60cps NLQ*
- *8K Printer Buffer + 3 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 240 x 240dpi*
- *Epson and IBM Emulation*
- *FREE Colour Kit*
- *FREE Silica Printer Starter Kit*

RRP £189
COLOUR KIT £41
SILICA STARTER KIT £25
TOTAL VALUE: £255
SAVING £66
SILICA PRICE: £189

£189
+VAT= £222.08 ref: PRI 2319



192 CPS — 80 COLUMN

- *Citizen Swift 9 - 9 pin - 80 column*
- *192cps Draft, 48cps NLQ*
- *8K Printer Buffer + 3 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 240 x 240dpi*
- *Epson and IBM Emulation*
- *Colour Option available*
- *FREE Silica Printer Starter Kit*

RRP £239
SILICA STARTER KIT £25
TOTAL VALUE: £264
SAVING £75
SILICA PRICE: £189

£189
+VAT= £222.08 ref: PRI 2209



192 CPS — 136 COLUMN

- *Citizen Swift 9x - 9 pin - 136 column*
- *192cps Draft, 48cps NLQ*
- *8K Printer Buffer + 3 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 240 x 240dpi*
- *Epson and IBM Emulation*
- *Colour Option Available*
- *FREE Silica Printer Starter Kit*

RRP £329
SILICA STARTER KIT £25
TOTAL VALUE: £354
SAVING £105
SILICA PRICE: £249

£249
+VAT= £292.58 ref: PRI 2309

24 PIN PRINTER

NEW! LIMITED OFFER



PRINTER + SOFTWARE + COLOUR

- *Citizen Swift 24e - 24 pin - 80 column*
- *216cps Draft, 72cps LQ*
- *8K Printer Buffer + 6 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360dpi*
- *Epson, IBM & NEC P6 Emulation*
- *FREE Colour Kit*
- *FREE Silica Printer Starter Kit*
- *FREE Lotus AMI 1.2 Word Processor and DTP package*
- *FREE Adobe Type Manager V1.15*

Lotus + Adobe software is for PC only on 3½" disk

RRP £369
COLOUR KIT £38
SILICA STARTER KIT £25
LOTUS AMI 1.2 WP/DTP PACKAGE ... £95
ADOBE TYPE MANAGER V1.15 (Fonts) £79
TOTAL VALUE: £606
SAVING £337
SILICA PRICE: £269

£269
+VAT= £316.08 ref: PRI 2544

24 PIN PRINTERS

NEW!



192 CPS — 80 COLUMN

- *Citizen 224 - 24 pin - 80 column*
- *192cps Draft, 64cps LQ*
- *8K Printer Buffer + 4 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360dpi*
- *Epson and IBM Emulation*
- *Colour Option Available*
- *FREE Silica Printer Starter Kit*

RRP £269
SILICA STARTER KIT £25
TOTAL VALUE: £294
SAVING £95
SILICA PRICE: £199

£199
+VAT= £233.83 ref: PRI 2484



192 CPS — 136 COLUMN

- *Citizen Swift 24x - 24 pin - 136 column*
- *192cps Draft, 64cps NLQ*
- *8K Printer Buffer + 4 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360dpi*
- *Epson, IBM and NEC P6 Emulation*
- *Colour Option Available*
- *FREE Silica Printer Starter Kit*

RRP £489
SILICA STARTER KIT £25
TOTAL VALUE: £514
SAVING £165
SILICA PRICE: £349

£349
+VAT= £410.08 ref: PRI 2574

INKJET PRINTER

NEW!



360 CPS — 80 COLUMN

- *Citizen Projet - inkjet - 80 column*
- *360cps Draft, 120cps NLQ*
- *50 Nozzle Head - Whisper Quiet 47dB(A)*
- *8K Printer Buffer + 3 Fonts*
- *Optional HP Compatible Font cards*
- *Parallel Interface*
- *Graphics Resolution: 300x300dpi*
- *HP Deskjet plus emulation*

RRP £496
TOTAL VALUE: £496
SAVING £137
SILICA PRICE: £359

£359
+VAT= £421.83 ref: PRI 2090

NOTEBOOK PRINTER



64 CPS — 80 COLUMN

- *Citizen PN48 Notebook Printer*
- *Non-impact Printing on Plain Paper*
- *53cps LQ - 4K Buffer + 2 Fonts*
- *Rear and Bottom Paper Loading*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360dpi*
- *Epson, IBM, NEC P6 & Citizen Emulation*
- *Powered From Mains, Battery or Car Adaptor*
- *FREE Silica Printer Starter Kit*

RRP £325
SILICA STARTER KIT £25
TOTAL VALUE: £350
SAVING £101
SILICA PRICE: £249

£249
+VAT= £292.58 ref: PRI 2100

STARTER KIT WORTH £29.38 INC VAT — FREE!

This starter kit will help you to get you up and running with your new Citizen dot matrix or notebook printer when you buy it from Silica Systems.

- 3½" Disk - Amiga & ST Drivers
- 3½" Disk - Driver for Windows 3
- 2 Metre Parallel Printer Cable
- 200 Sheets of Continuous Paper
- 100 Continuous Address Labels
- 5 Continuous Envelopes

CITIZEN AMIGA PRINT MANAGER WORTH £14.95 INC VAT (LIMITED PERIOD ONLY)

The ultimate printer driver program for your Amiga, which dramatically enhances printed output. Provides drivers for all Citizen printers and replaces Amiga's normal printer preference system - printing is quicker, colours more vibrant, graphics less fuzzy. Easy to use. Print Manager is supplied with its own instruction manual. Main features include:

- Improved Image Smoothing
- Gamma/Colour Correction
- Image Scaling
- Colour Separation
- Reduces/Eliminates Banding

ACCESSORIES

SHEET FEEDERS

PRA 1200	120D	£71.38
PRA 1215	124D/224/Swift 9/24	£88.70
PRA 1228	124D/224/Swift 9/24	£42.00

SERIAL INTERFACES

PRA 1189	120D+	£56.45
PRA 1209	Swift 9/9x/124D/224	£32.25
PRA 1709	Swift 24/24x/24e	£26.38

32K MEMORY EXPN

PRA 1753	124D/224/Swift 24	£13.10

PRINTER STAND

PRA 1242	124D/224/Swift 9/24	£24.03
		£30.66

ORIGINAL RIBBONS

RIB 3520	120D/Swift 9 Black	£2.91
RIB 3949	Swift 9/9x Black	£7.15
RIB 3924	124D/Swift 24 Black	£4.70
RIB 3936	224/Swift 9/24 Colour	£15.63
RIB 3248	PN48 Single Strike	£3.61
RIB 3348	PN48 Multi Strike	£3.61

COLOUR KITS

PRA 1236	224/Swift 9/24/24e	£35.25
PRA 1240	Swift 9x/24x	£35.25

PN48 ACCESSORIES

PRA 1148	PN48 Battery	£51.70
PRA 1155	PN48 Cable Extn	£ TBC
PRA 1162	PN48 Car Adaptor	£ TBC

Accessories prices inc. VAT & delivery

SILICA SYSTEMS OFFER YOU

- ***FREE OVERNIGHT DELIVERY:*** On all hardware orders shipped in the UK mainland.
- ***TECHNICAL SUPPORT HELPLINE:*** Team of technical experts at your service.
- ***PRICE MATCH:*** We normally match competitors on a "Same product - Same price" basis.
- ***ESTABLISHED 12 YEARS:*** Proven track record in professional computer sales.
- ***BUSINESS + EDUCATION + GOVERNMENT:*** Volume discounts available 081-308 0888.
- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or software, or help and advice. And, will the company you buy from contact you with details of new developments and products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE 081-309 1111

SILICA SYSTEMS

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	**Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm	No Late Night Opening	Fax No: 081-308 0608
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA	**Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm	No Late Night Opening	Fax No: 071-323 4737
LONDON SHOP:	Selfridges (1st Floor), Oxford Street, London, W1A 1AB	**Tel: 071-629 1234**
Opening Hours: Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm	Extension: 3914
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	**Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm	Fax No: 081-309 0017

To: Silica Systems, AMCOM-0792-55, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A CITIZEN COLOUR CATALOGUE

Mr/Mrs/Miss/Ms: .... Initials: .... Surname: ....

Address: ....

.... Postcode ....

Tel (Home): .... Tel (Work): ....

Company Name (if applicable): ....

Which computer(s), if any, do you own? 55F

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

GraphicStation SUPPORT

This month we continue with the final part of the PrintStudio story

If you read last month's GraphicStation you should have the basics of PrintStudio in hand. This month we'll finish our look at this excellent utility with an in-depth guide to getting your prose in print.

The first task is to ensure that the files you wish to print have been saved in the Ascii file format. If you attempt to print files which have been written and saved in a wordprocessor, using its own proprietary format, PrintStudio will print nothing more than good, old-fashioned gobbledygook.

To employ PrintStudio the text to be printed must be Ascii. All major processors and text editors are capable of saving in this format so there shouldn't be any difficulty providing the necessary files for the program.

As mentioned last month you can employ the GraphicStation's own text editor – alias QED – which you'll find on pull-downs within the main GraphicStation screen. All the files created with the aforementioned software are automatically saved in the Ascii file format, so it's ideal, and of course very convenient, being only a couple of mouse clicks away.

Assuming you have the file in the necessary format, it's time to activate the GraphicStation's text icon and get down to business. The first job is to load the file you require. Thanks to a standard click select requester, this literally couldn't be simpler.

Once loaded, a new interface displays the imported text which can be scrolled through via the slider at the top of the screen – but it's the lower portion that holds the real power...

Some of the options on offer are self explanatory so we'll concentrate on the slightly more mysterious options, starting with the Select box icon. Once activated yet another control panel appears. From here you can define the start and end point of a specific section ready for printing.

There are several methods of selection, the most direct being typing the relevant line numbers directly into the Beg and End requesters on the left of the control panel.

To see your selection simply click on Show and the program will automatically update the display with your selection.

Alternatively, you can use the central collection of icons to adjust and select line by line. Using this option you must first select the start line by using the arrow keys to scroll the cursor through the available text.

Arrow icons

Once you've located the start line, the next task is to click on the mark icon and then once again employ the talents of the arrow icons to expand you selection – in either direction.

Once you've reached the last line in your selection, simply click on the Show icon and your selection will be complete. The screen should update with your new box. Click OK, and you'll be returned to the main Text-Print screen.

If you now select Print, the final print requester will appear. As you'll see, this requester allows you to define the finishing touches which anyone who has employed Workbench as a printing environment will be familiar with.



Headlines, times, dates and optional line spacing – all waiting at the touch of a button



A simple main screen that leads to countless additional options



A perfect opportunity to pick and choose with the Option box selection panel

If you are unsure of exactly what these options mean you'll find a full description in your Workbench manual.

On the lower section of the requester you'll see the print commands themselves. The print option actually starts the printing process but you also have the option to write the print file to disk.

Using this option it's possible to save various sections of text from assorted files and then print these in the desired order later via the CLI.



Add those essential finishing touches before you go to print...

To print saved files from disk, first open a Shell window and change the directory to the one containing the files you wish to print. Then list the contents using the Dir command.

Now type in either of the commands listed below, replacing the "{Filename}" with that of the file you wish to print:

```
COPY {FILENAME} TO PRT:
```

or:

```
TYPE TO PRT: {FILENAME}
```

Of course you could take the slightly easier route and load the printed disk file directly back into PrintStudio, reprinting from there.

For the time being, let's return to the main Print Text menu and look at some of the other options on offer. To do this simply click on cancel and you'll be back where we started. This time, select the Options icon to reveal yet another requester.

Here you can add those essential extras to finish stylising the file prior to printing. In the first section of the requester you'll find the headline and date options.

If you require a headline, simply type the text into the requester and make sure you click on the headline push button to activate the option.

Next, select its print position, and finally define if it is to appear once or on every page of the printout. Lastly, click on the word Headline itself to activate the headline styling requester.

Next move to the Time and Date options – again don't forget to activate the push button beside the options. If you now click on Date and Time, the requester will be updated from the machine's internal clock. If you require an alternative date simply type it in manually.

If you do plan to use a time or date other than the actual time, make sure you activate the Buf option which instructs PrintStudio to employ the time and date you have defined.

If the Act option is active the program will default to the internal time and date defined by the built-in clock.

The next set of options are again rather self-explanatory, but if you click on Page Number it will reveal yet another styling requester in a similar vein to that of Headline, but this time all the options refer to line spacing between various elements within the page layout. Armed with the above you should now be able to take full advantage of the power that PrintStudio has to offer. AC

Microdrive UK Ltd

22, HIGH STREET
HANSLOPE
MILTON KEYNES MK19 7LQ

VISA · Access

CREDIT CARD ORDERS HOTLINE (0908) 511442

Please make cheques and P.O.'s payable to: **MicroDrive UK Ltd.**
P&P is included in UK. Europe add £2.00 per item, elsewhere add £3.50 per item.

ALL PRICES INCLUDE VAT

ALL ITEMS SUBJECT TO AVAILABILITY E&OE

BUDGET TITLES

AFTER BURNER	£6.50
ARKANOID 2	£6.50
BUBBLE BOBBLE	£6.50
BARBARIAN 2	£6.50
BATTLE SQUADRON	£6.50
CARRIER COMMAND	£6.50
CHUCKIE EGG 2	£8.50
CYBERBALL	£6.50
DAILY DBL. HORSE RACING	£6.50
DRAGON BREED	£6.50
F16 COMBAT PILOT	£8.50
GAUNTLET 2	£6.50
HITCHHIKERS GUIDE	£6.50
HUNT FOR RED OCTOBER	£6.50
JET SET WILLY	£7.50
KICK OFF & EXTRA TIME	£7.50
MANCHESTER UNITIED	£6.50
MIDNIGHT RESISTANCE	£6.50
OPERATION WOLF	£6.50
PAPERBOY	£6.50
SWITCHBLADE	£6.50
SUPER OFF ROAD RACING	£8.50
YOGI'S BIG CLEAN UP	£9.50
Z-OUT	£8.50

ACCESSORIES

½ MEG UPGRADE & CLOCK	£24.99
4 PLAYER ADAPTOR	£7.99
40 LOCKABLE DISK BOX	£6.99
80 LOCKABLE DISK BOX	£8.99
120 LOCKABLE DISK BOX	£12.99
150 POSSO STACKABLE BOX	£17.99
BOX 10 BULK DISKS	£6.99
BOX 10 SONY DISKS	£9.99
DISK CLEANING KIT 3.5"	£4.99
AMIGA DUST COVER	£3.99
MOUSE MAT	£3.99
ROLL 1000 LABELS 3.5"	£11.99

JOYSTICKS

QUICKSHOT PYTHON 1	£9.99
QUICKSHOT MAVERICK	£13.99
QUICKJOY FOOT PEDAL	£19.99
QUICKJOY JET FIGHTER	£12.99
QUICKJOY TOPSTAR	£19.99
COMP PRO 5000 EXTRA CLEAN	£12.99
CHEETAH 125+	£8.99
NAVIGATOR	£12.99
ZIPSTICK	£12.99

Much Much more available, please phone for FREE catalogue

ULTIMATE SELECTION

4D SPORTS DRIVING	£16.50
4D SPORTS BOXING	£16.50
A320 AIRBUS	£24.50
A10 TANK KILLER ENH	£21.50
ABANDONED PLACES	£17.50
ADDAMS FAMILY	£16.50
ADVANTAGE TENNIS	£16.50
AFRIKA KORPS	£16.50
AGONY	£17.50
ALCATRAZ	£17.50
ALIEN BREED	£16.50
AMAZING SPIDERMAN	£16.50
ANOTHER WORLD	£17.50
ARACHNAPHOBIA	£16.50
BABY JO	£16.50
BACK TO THE FUTURE III	£15.50
BARBARIAN II	£16.50
BARDS TALE III	£16.50
BIG RUN	£16.50
BILLY THE KID	£16.50
BIRDS OF PREY	£23.50
BITMAP BROTHERS	£17.50
BLUES BROTHERS	£16.50
BLUE MAX	£18.50
BONANZA BROTHERS	£16.50
BRIDES OF DRACULA	£17.00
CASTLES	£20.50
CENTURION	£16.50
CELTIC LEGENDS	£21.50
CHAOS ENGINE	£20.50
CONAN THE CIMMERIAN	£21.50
COSCO HEAT	£15.50
COVERT ACTION	£23.50
CRIME WAVE	£16.50
CRUISE FOR A CORPSE	£17.50
CYBERCON III	£16.50
DAYLIGHT ROBBERY	£16.50
DAS BOOT	£20.50
DEATHBRINGER	£16.50
DEUTEROS	£17.50
DELUXE PAINT 4	£58.50
D-GENERATION	£17.50
DISCIPLES OF STEEL	£17.50
DOUBLE DRAGON III	£16.50
DICK TRACEY	£16.50
DUCK TALES	£16.50
ELF	£16.50
ELVIRA 2	£23.50
EPIC	£17.50
EYE OF THE BEHOLDER	£19.50
EYE OF THE BEHOLDER 2	£21.50
F-15 STRIKE EAGLE II	£23.50
F-117A STEALTH FIGHTER 2	£21.50
F-19 STEALTHFIGHTER	£19.50
FACE OFF ICE HOCKEY	£15.50
FINAL BLOW	£16.50
FINAL FIGHT	£16.50
FIRST SAMURAI	£16.50
FLIGHT OF THE INTRUDER	£17.50
FORMULA ONE GRAND PRIX	£23.50
FUZZBALL	£15.50
GAUNTLET III	£16.50
G-LOC R36D	£16.50
GODS	£15.50
GOLDEN AXE	£15.50
GERM CRAZY	£16.50
GRAHAM GOOCH CRICKET	£21.50
GUNSHIP 2000	£21.50
HARLEQUIN	£16.50
HARD NOVA	£16.50
HARPOON	£19.50
HERO QUEST (1 MEG)	£21.50
HEIMDALL	£19.50
HOOK	£15.50
I JONES & FATE OF ATLANTIS	£19.50
IAN BOTHAMS CRICKET	£16.50
IT CAME FROM THE DESERT	£15.50
J WHITE'S WHIRLWIND SNOOKER	£19.50
JOHN MADDENS FOOTBALL	£16.50
KICK OFF II	£13.50
K.O. 2 FINAL WHISTLE	£8.50
K.O. 2 GIANTS OF EUROPE	£8.50
K.O. 2 RETURN TO EUROPE	£8.50
K.O. 2 SUPER LEAGUE	£10.50
K.O. 2 WINNING TACTICS	£8.50
KID GLOVES II	£16.50

ULTIMATE SELECTION

KINGS QUEST V	£23.50
KNIGHTMARE	£17.50
KNIGHTS OF THE SKY	£23.50
LAST NINJA 3	£16.50
LEANDER	£16.50
LEISURE SUIT LARRY 5	£23.50
LEMMINGS	£16.50
LEMMINGS - DATA DISK	£13.50
LEMMINGS - STAND ALONE	£16.50
LIFE AND DEATH	£16.50
LORD OF THE RINGS	£20.50
LORDS OF THE RISING SUN	£16.50
LOTUS TURBO CHALLENGE 2	£16.50
MAD DOG WILLIAMS	£21.50
MAGIC POCKETS	£16.50
MAN UTD EUROPE	£16.50
M. DITKA ULTIMATE FOOTBALL	£18.50
MEGA TWINS	£16.50
MERCHANT COLONY	£20.50
MICROPROSE GOLF	£23.50
MIDWINTER II	£23.50
MIG 29 SUPER FULCRUM	£24.50
MIGHT & MAGIC III	£19.50
MOONSTONE	£20.50
MONKEY ISLAND	£16.50
MONKEY ISLAND II	£16.50
MYTH	£16.50
NAVY SEALS	£15.50
NEVERENDING STORY II	£16.50
OPERATION STEALTH	£16.50
OUT RUN EUROPA	£16.50
PAPERBOY 2	£16.50
PEGASUS	£16.50
PGA GOLF PLUS	£22.50
PGA GOLF - DATA DISK	£12.50
PITFIGHTER	£16.50
PLOTTINGS	£15.50
POPULOUS II	£20.50
POPULOUS/SIM CITY	£20.50
POWERMONGER	£18.50
PREDATOR II	£11.50
PLAYER MANAGER	£13.50
RAILROAD TYCOON	£24.50
R.B.I. 2 BASEBALL	£10.50
REALMS	£20.50
RED BARON	£23.50
ROBOCOD	£16.50
ROBOCOP III	£16.50
ROBIN HOOD	£16.50
ROD LAND	£16.50
ROLLIN' RONNY	£16.50
RUGBY WORLD CUP	£16.50
RUBICON	£17.50
SHADOWLANDS	£20.50
SILENT SERVICE II	£21.50
SIM ANT	£16.50
SIMPSONS	£16.50
SHUTTLE	£28.50
SPACE ACE 2	£25.50
SPACE 1889	£19.50
SPACE CRUSADE	£17.50
SPACE GUN	£16.50
SPACE QUEST IV	£25.50
SPECIAL FORCES	£22.50
SPEEDBALL II	£15.50
STEEL EMPIRE	£17.50
SUPER SPACE INVADERS	£20.50
SUSPICIOUS CARGO	£16.50
TEAM YANKEE	£19.50
TEAM YANKEE II	£23.50
TERMINATOR II	£16.50
THE GODFATHER	£17.50
THUNDERHAWK AH-73M	£21.50
THEIR FINEST HOUR	£19.50
THEIR FINEST MISSION	£10.50
ULTIMA VI	£20.50
UNDER PRESSURE	£17.50
UTOPIA	£20.50
VIDEO KID	£16.50
VROOM	£16.50
WILLY BEAMISH	£21.50
WINGS	£15.50
WOLF CHILD	£16.50
WOLF PACK	£15.50
W.W.F. WRESTLING	£16.50

COMPILATIONS

CARTOON COLLECTIONS
Treasure Island Dizzy, Slightly Magic, CJ's Elephant Antics, Spike, Seymour Goes To Hollywood
£16.99

BOARD GENIUS
Scrabble, Cluedo, Risk, Monopoly
£16.99

FOUR WHEEL DRIVE
Team Suzuki, Combo Racer, Lotus Turbo Challenge, GT Four Rally
£19.99

QUEST FOR ADVENTURE
Operation Stealth, Main Streets, Indianna Jones Last Crusade
£22.99

NINJA COLLECTION
Double Dragon, Dragon Ninja, Shadow Warrior
£13.99

SUPER SEGA
Super Monaco GP, Golden Axe, Eswat, Shinobi, Crackdown
£20.99

SOCCERMANIA
Football Manager 2, Microprose Soccer, Gazza's Soccer, Football Manager World Cup Edition
£12.99

FIST OF FURY
Ninja Warriors, Double Dragon 2, Dynamite Dux, Shinobi
£16.99

AIR, LAND & SEA
688 Attack Sub, Indy 500, FA18 Interceptor
£22.99

ORDER FORM

PRODUCT	PRICE
TOTAL	

Name: ......
Address: ......
......
......
Postcode: ......
Tel: ......
C/Card No: ......
Exp. Date: ...... AMC 7

FERGUSON SMITH

'State of the Art technologies for your Amiga'

QUALITY AND PERFORMANCE AT UNBEATABLE PRICES

SEAL 'N' TYPE £11.95



- Protects your keyboard while you type
- Custom made for the Amiga 500/500+/1500/2000/3000
- Soft, flexible invisible shield–fits like a glove
- Made from high quality, durable polymer

RAM EXPANSION

- 512k RAM A500 without clock £19
- 512k RAM A500 with clock £24
- 8Mb BOARD for A500 incl. 2Mb £129
- 8Mb BOARD for A500 incl. 4Mb £189
- 8Mb BOARD for A500 incl. 8Mb £299
- Power 1.5Mb A500 (allows for 1Mb chip RAM....£85
- 1Mb Through Port for A500....£49.95
- 1Mb Chip RAM A500 PLUS....£39.99
- GVP Series II RAM (A1500) – 2/8 Meg populated....£169

POWER FLOPPY DISK DRIVE

PCA 880b–Compact external drive with through-port, isolating switch, anti-click board PLUS the Blitz backup system & in-built virus blocker .£69.95

PC A880dd–External Dual Drive. Anti-click boards in both drives. External power supply in quality compact case....£125

ACCESSORIES

High Quality Dust Cover A500 ....£4.95

3.5" Disk Boxes

50 Capacity Lockable....£6.95
80 Capacity Lockable....£9.95
100 Capacity Lockable....£11.95
Mitsubishi 3.5" DS/DD....£0.50
50 Mitsubishi diskettes + 100 capacity box..£34.99
2-Piece Printer Stand....£7.95
Printer Ribbons....Phone
8mm Mouse Mat....£3.95

AMIGA PACKS

AMIGA 500 PLUS (1 Meg)
Cartoon Classics Pack
Software includes The Simpsons, Lemmings, Captain Bart & Deluxe Paint III **£339**

AMIGA 1500 PLUS (V2.04)
Pack includes Deluxe Paint III, The Works, Home Accounts, O/S Software & much more. **£569**

NEW ROM KICKSTART 2.04 WORKBENCH 2.0

Upgrade your machine to version 2.0 for only

£84.95

Package includes ROM 2.04 chip, 4 workbench diskettes and manual. Original Commodore.
NB: Due to the weight of this product, please add £2.50 P&P)

NEW ENHANCED CHIP SET

8372A Fatter Agnus....£45
Super Denise....£45

PHOENIX ROM SHARER

Switch between Kickstart 1.3 & 2.04 ....£24.99
Keyboard switchable version....£34.99

NEW GVP A530 COMBO/52Mb HD

The Ultimate A500 Expansion Product
40MHz Accelerator + 52/120/240Mb HDD + 8Mb RAM Board (1Mb)



- 40MHz 68030EC CPU
- Runs at 12.1 MIPS–Faster than an A3000
- Quantum SCSI Hard Drive 52, 120, 240 Mb Versions
- Ultra fast 11ms access. Transfer rate up to 2,100k/sec (with 240Mb Drive)
- Up to 8Mb 32-bit FastRAM – 1Mb populated
- Mini slot for future expansions – PC-AT Emulator NOW AVAILABLE
- 2 year warranty

£699

GVP SERIES II HARD DRIVES

52Mb....£347
120Mb....£499
240Mb....£789

GVP SERIES 2 HARD CARD

52Mb....£275
120Mb....£445
240Mb....£675
420Mb....£1275

NEW GVP G-FORCE 25MHz & 40MHz 68EC030 COMBO BOARDS

Accelerator, RAM Board & Hard Disk Controller in One

- 25Mhz – 1Mb/13Mb 60ns 32-bit RAM, 68882 Co-processor **£579**
- 40Mhz – 4Mb/16Mb 60ns 32-bit RAM, 68882 Co-processor **£899**

MICROBOTICS 68030 ACCELERATORS

VXL-30 25MHz....£259
VXL-30 40MHz....£365
VXL-30 2Mb 32-bit RAM....£199

EMULATORS

GVP PC-286 16MHz Emulator for Series II HD8+ (A500)....£249
Vortex ATonce Plus, 286. 16MHz 512k RAM (A500/1500/2000)....£238

MONITORS

Commodore 1084SPI 14" Stereo Colour Monitor....£249
Philips CM8833 Mk II Stereo Colour Monitor....£229

PRINTERS

Full range of 9 and 24-pin dot matrix printers including FREE starter kit. PRICES FROM......£129
Call for details

NEW VLAB Real-Time Video Digitiser

This board which accepts both PAL and NTSC input, grabs frames in YUV format, and provides excellent image quality. The built-in ARexx port for automated video capture.... **£299**

ABACUS/ADDISON BOOKS & SOFTWARE

Amiga for Beginners....£12.45
Best of Amiga Tips & Tricks....£24.95
Amiga Basic Inside & Out....£18.45
Amiga C for Beginners....£17.95
Amiga C Advanced....£29.99
Amiga DOS Inside & Out....£19.99
Amiga Graphics Inside & Out....£29.99
ROM Kernal: Devices 3rd Ed....£24.99
Amiga Machine Language....£19.99
Making Music + Disk....£27.99
Amiga 3D Basic Graphics....£17.95
Using ARexx + Disk....£27.99
Desktop Video Power....£24.99
User Interface Guide....£17.99
Amiga Hardware Reference....£24.99
ROM Kernal: Libs 3rd Ed.....£29.99

FULL RANGE OF APPLICATIONS AND LEISURE SOFTWARE AVAILABLE – PHONE FOR DETAILS

ALL PRICES INCLUDE VAT, P&P
Prices subject to change without notice. E&OE

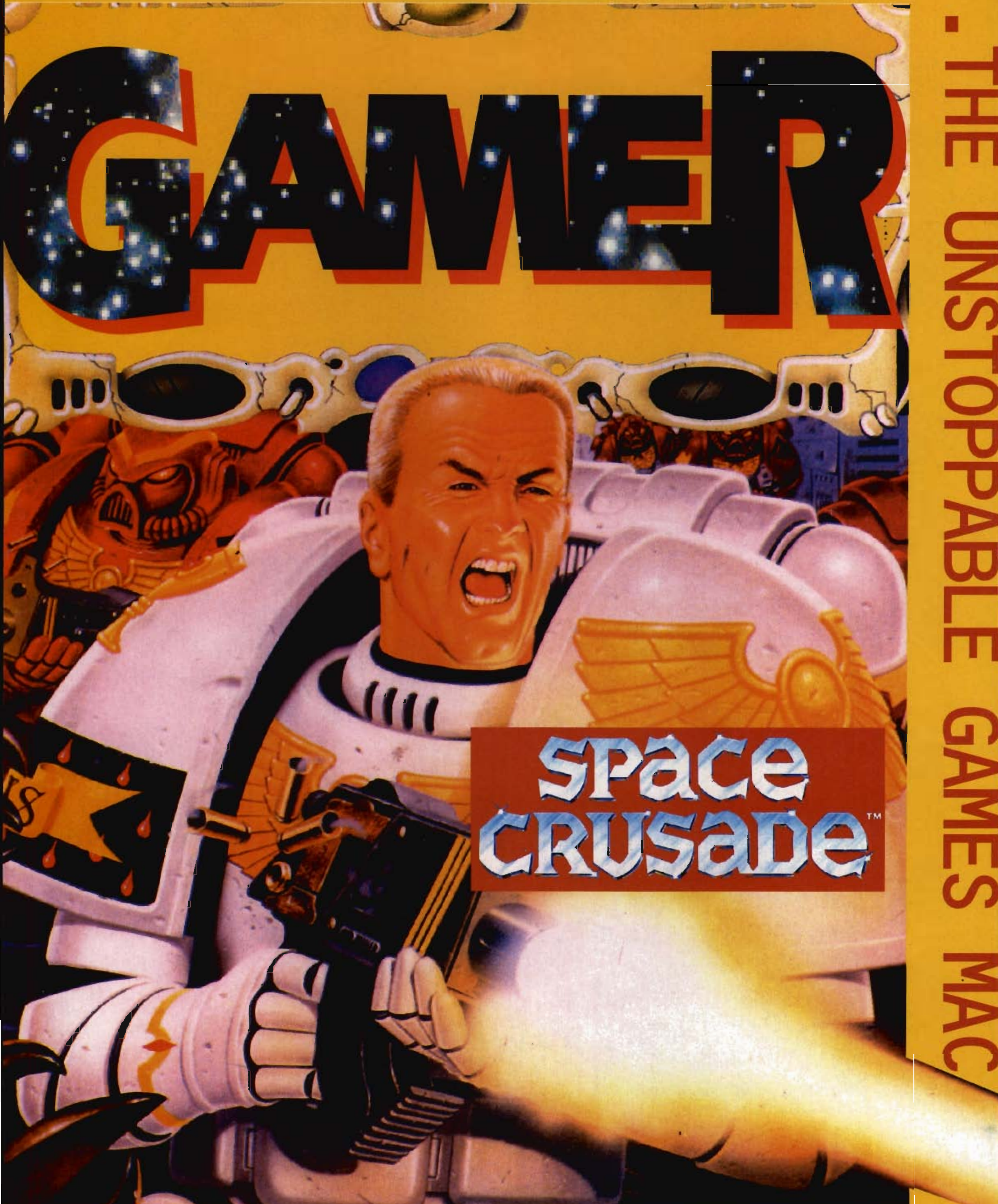
FERGUSON SMITH
14 Dowanside Road, Glasgow G12 9DA

Tel: 041 339 3590
10am to 6pm Monday to Friday

A COMPLETE RANGE OF PRODUCTS AVAILABLE FOR THE AMIGA – CALL FOR UNBEATABLE PRICES!

FULL MENTAL JACKET

ISSUE TEN ▪ JULY 1992



THE UNSTOPPABLE GAMES MAC E

PLUS...

REVIEWS... EYE OF THE BEHOLDER 2 • BLACK CRYPT • CASTLES • COVERT ACTION
LEISURE SUIT LARRY 5 • ORK • THE MANAGER • AND MORE!

ALSO... SPECIAL FORCES TACTICS • B17 PREVIEW • CHARTS • NEWS

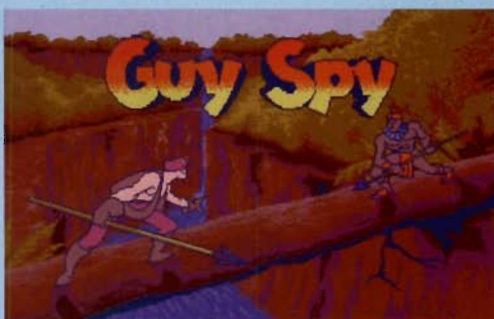
ONword

what's hot what's not views hype

With my little eye...

Currently sweating away for the coveted title of "Busiest Software House In Basildon" are Empire. As we speak they've got three new releases tumbling down the pipeline towards the dusty shelves of software–ville.

Guy Spy is the latest from the people responsible, if not downright guilty, for Space Ace and Dragons Lair. It tells the tale of, strangely enough, a spy called Guy, and from what we've seen it actually looks a lot more playable than it's ill-fated ancestors.





Also waiting in the wings is the cutesy platform romperama, Cool Croc Twins. Playing in a Mario platform-style, it sees Funk and Punk Croc trying to catch up with their mutual girlfriend, Crocette.



Quite how this randy twosome think they can get away with sharing a girlfriend is beyond me. Crocodiles, eh? Nice, crisp cartoony graphics and oodles of cool should be ready even before you finish this senten...



Not a Euro Disney competition

No, I'm afraid it's not, although by the number of Euro Disney compos currently doing the rounds, you'll probably win a visit there just for existing. What we do have, however, is a peep at the latest from Infogrames Disney licence.

The Rocketeer is the game of the film of the man with a sparkler up his bum. Zoom around the place beating up Nazis and generally being rocket-like. It promises some sizzling animation and digitised graphics, so it should look a treat.



Oh, and if you're interested, the film should be in your local video shop round about now. Light the touchpaper and stand well back...

Name that toon

Following on from last month's teeny peak at Jim Power, Loriciel have unveiled yet another new game. It's called The Cartoons and promises to be, gasp, a bit like Lemmings.



You've got a little bloke who wanders about the place being a bit dim and dying a lot. You control a superhero fella who has to keep his wee pal alive by blocking holes, killing nasties and generally looking out for his mates best interests. Or if you like, you can beat the little pillock up yourself.

To be honest, it's not that much like Lemmings, but it is a really good fun game. As the name suggests, it all looks very cartoony and it should be ready for us ungrateful Brits in September.



The prat with the beard is back

If our Cheat Mode on Knightmare a few months ago has whet your whistle, then dry it off and read on for more enthralling news.

The all round smarty-pants responsible for Knightmare (the game, not the rather sad TV prog), Tony Crowther, has put pen to paper and come up with a complete hint book.

It won't give you the answers straight out, 'cos in true Knightmare style everything's in riddles and cryptic clues.

So if you're still floundering about in the dark with a bucket on your head, cough up a mere £5.99 at your nearest (or indeed, furthest away) software shop for a copy. Failing that, give Mindscape a tinkle on 0444 246333 to buy one with a credit card.

What thoroughly nice people.

Hudson! We are leaving!

Yup, coming soon to a cinema near you is the third instalment in the ongoing battle between Warrant Officer Ellen Ripley and numerous slimy monsters.

Alien 3 is currently being trailed in cinemas up and down the country, and also at the beginning of the rather gnarly Aliens – Special Edition video.

Rumours have been buzzing around for yonks about the film. It's cost too much, say some. It's crap say others. Whatever it's like, you'll be able to join in the fun on your Amiga thanks to those gorgeous fun-bundles at Accolade.

We can't wait to get a peek at it, so you're guaranteed to hear all about it soon.

You! Love! Us!

Indeed you do! Thanks to everyone who took the time to fill in and return the Gamer survey – it's nice to know we're getting it right!

It seems that the majority of you think that Gamer isn't big enough, and that the reviews should be just the way they are. It also seems that most of you buy the mag yourself, with ten per cent of you reading a parent's copy.

You want us to review all types of games, and pretty much everybody reads every single last juicy scrap of Gamer. It seems that most of you are aged between 13 and 25, although we have readers as young as six-year-old Greig Muir going right up to Mrs A Cruttenden, a grandmother from Basingstoke (who said chivalry was dead? We'd never give away a lady's age!).

A fair majority also suggested that Gamer's page size could become the same as the rest of Amiga Computing, and we're looking into it right now.

The lucky winner of the Gamer Bundle of games 'n' stuff is Alan Ben Lampard from Weymouth. Quite a few of you pleaded poverty for the games, but none so eloquently as Alan. The bundle's on it's way.

Oh no! It can't be!

Yes it is! It's another pointless Gamer compo. The game up for the proverbial grabs this month is none other than Electronic Arts' throbbingly big hit, John Madden American Football. Zoiks, eh?

And as usual, we're going to ask you to do something really trivial and stupid to win it (along with a veritable plethora of other goodies).

Obviously, we've tied the compo in to American Football, and so you're going to have to dig out the A to Z for this one. We want you to make up your own American Football team, and it has to be from a real town in Great Britain.

So you could for instance have the Pratts Bottom Bombers. Except you can't, 'cos that'd be a bit easy.



If you're feeling particularly creative, then design the helmet logo and strip. Name all the players. Go out, form the team and win a trophy. But it's the name that counts. All we ask is that it's from a real town. We will be checking, so no cheating.

The more bizarre and embarrassing the name, then the better your chances of winning. Good luck, and keep your defence around the endzone.



THE DREAM TEAM

hulk hogan - richard "WWF" williams
lettuce etching - daniel "swirly bits" whitehead
Jimmy Hill's mate - jonathan "clearly" maddock
nothing at all - darren "too busy" evans
rave animal - phil "get sorted" morse
arty blokes - terry "rowlf" thiele
tym "dr teeth" lecky
mike "gonzo" hardman
gets rid of fatty stains
at low temperatures

ad sales - ruth priestley
jane conway
0625 878888

Six beefy bouncers breathing on your toast
climax

next month: is Elvis really Sonic the Hedgehog, and just who are the Bee Gees?

GAMER
INNER VISION

REVIEWS

REGULARS

Brats entertainment...

WILLY BEAMISH

DYNAMIX ▪ £34.99 ▪ Hard drive recommended ▪ Mouse ▪ Out now



The much fabled Nintari Championships, but can Willy get there?

Kids eh? What lovable little tykes they are. As soon as they can walk, they learn the basic skills of writing on wallpaper in crayon, spilling things just to see what yoghurt looks like out of the pot, helping themselves at the Woolies pic 'n' mix counter and saying "poo" just to annoy Great Aunt Matilda.

Actually, now you think about it, kids can be pretty unlovable most of the time. And they get worse as they get older.

Our Willy is one such tearaway. A typical American pre-pubescent school-room terrorist, he's addicted to Nintari video games (now there's a subtle play on words, eh?), eats pizza and, to be brutally frank, I'd very probably hate his guts if I ever met him. And yet the game is appealing in a perverse sort of way.

You start the game in school. It's the last day before the summer holidays, sorry, summer vacation and Willy has landed himself in detention. The long, and really quite dull, intro' sequence shows Willy's pet frog, Horny (arf arf arf), leaping about in assembly, or roll call, or whatever the Americans call it.

He lands on the headmast... sorry, principal's head and nicks his wig. So, detention for Willy. Can you figure out how to sneak home? If so then you get to wander around your house, investigating all the rooms and basically just getting a feel for the place before dinner arrives, when you'll have to sit through several hours of dialogue in which you don't have any input.

This is one of Willy Beamish's biggest problems. There are a lot of semi-animated scene setters in which you don't do anything. You can't even hurry them along, so you just have to put up with them. In fact, it's best to save the game after each one, so you won't have to plough through it all again if you fail.

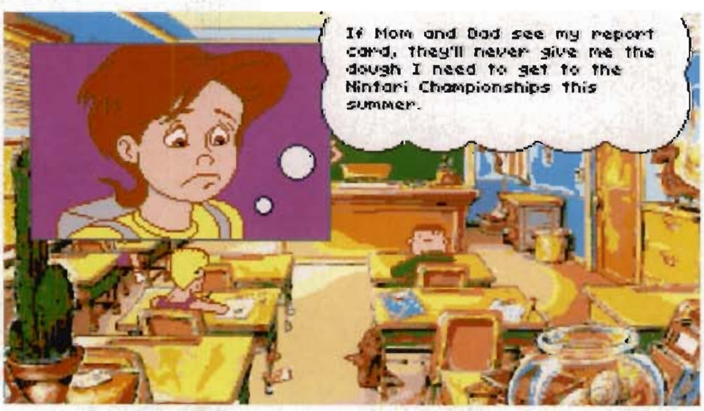
The whole game gives quite a good impression of things just cruising along as normal in Willy's life. You know, you have meals with the family, you meet your gang for pizza, and so on. Every now and again the game will prod you further along the story line, and you move onto the next problem.

The main aim of the game is to get Willy to the Nintari Championships, but he's a bit strapped for cash and Dad's lost his job. Cash can be raised by getting Horny to win the frog jumping contest. However, Horny is up against Turbofrog and he'll need some extra stimulus to get him into a winning mood.

Along the way you'll have to solve other little puzzles to continue along the right track. For instance, can you bluff your way out of a beating from the local hard man? Can you figure out how to get out of school in time to intercept your report card? Also lurking in the background is the mysterious Tootsweet company, who are plotting to do fiendish things in the town sewer system. Quite how this will affect you I've no idea, but the whole thing will probably come together in some exciting big finale-type thing.

Well, it's probably no surprise to find out that Willy Beamish is by the self same bloke who wrote the rather wonderful Heart of China (Gamer Gold last month, fact fans). This does indeed promise great things, but to my dismay things weren't quite as hot as I'd hoped.

As I've already said, there are too many instances where you just sit back and watch static screens, and then there are times where you seem to just wander around waiting for inspiration. At first glance it looks very interactive, a game to rival Monkey Island even, but closer scrutiny and repeated play reveals that your responses are very conditioned. Sometimes it may seem



Always a big problem for The Kids – how can you get more cash from Mum and Dad?



Ber-limey! The school nurse was never like this when I was a nipper!



The Beamish home. Not exactly poverty stricken are they?





that you've got several options open to you, but they all push you in the same direction. This may or may not bother you, but I couldn't help but feel a bit cheated by it.

There's humour, as you'd expect, but it's hard to tell just who it's aimed at. Sometimes there are clever little satirical digs at American society which will go way over kids' heads, and next you're being presented with a fart joke, which will have kids in stitches at the exclusion of us more refined adults.

On to technical things, and the graphics are quite nice. The backgrounds are often very detailed and colourful, laden with objects that you can examine, if not use.

The sprites are a bit stilted, as the hard drive whirring away frantically to itself proves, and a lot of the close-ups look like DPaint pictures. A nice cartoony feel, but a bit of a comedown after the lush scenery of Heart of China.

Sound is, amazingly, absolutely abysmal. There is a tune, but the hard drive accessing interferes with it. So one minute it's bouncing along quite happily and then it goes all slow and garbled as another animation is loaded in. It's just like when the batteries start to wear down in your Walkman, y'know?

All in all, Willy Beamish isn't a bad little game. It's just not as good as I so desperately wanted it to be. It's a confused little product, not quite sure what it wants to be. For a start, it's too expensive for kids. Some of the Americanisms will confound them, and the twelve (count 'em, twelve!) disks that need to be installed will bore them rigid. As for adults, there's just not enough interaction to warrant this kind of money.

It's charming and cute for a while, but once you've finished it – as you undoubtedly will, as it gives you so many prompts in the right direction – there's no incentive to try another route. Mainly because there is no other route. A brilliant idea, but a slightly less than brilliant game. Ho hum.

Daniel



Whenever he's feeling low, Willy's dad nips up into the attic to play with his train set. Sad...



This is Willy's room. In case you didn't guess



This is where Willy and his non-sexist, non-racist pals come to "hang out"

VISION

A pleasant cartoon feel, but at times a bit rough around the edges.

AUDIO

The tune is distorted horribly, and there are about five FX in the whole game.

PLAYABILITY

For the first few goes you'll be enthralled by the nostalgia of it all.

ADDICTION

Ultimately, trial and error will get you through. Too expensive for what there is.

78%



BLACK CRYPT

ELECTRONIC ARTS ▪ £25.99 ▪ 1 meg ▪ Mouse ▪ Out now

Oh good golly Miss Molly, would you Adam and Eve it? It's another one of those damn role-playing games.

Now for me, Dungeon Master was and still is one of the best RPGs of all time, and because of the popularity of that game several companies are trying to cash in.

So these days you get loads of RPGs, all trying to knock Dungeon Master off its throne. It has to be said that today's technology is tons better and it shows – take a look at Eye of the Beholder 2 as an example. Unfortunately poor old Dungeon Master gets wiped off the face off the earth.

So, it's no surprise that yet another RPG is available for you to buy. Brace yourselves, because here comes Black Crypt. Electronic Arts' newie promises to be the best RPG yet, but then again promises are made to be broken, so we shall see.

Unlike most RPGs, this hasn't got an epic novel to go along with it, but it does have a short story, and when I say short I mean short, as in Ronnie Corbett size. Well, I'll tell it anyway.

Years ago he was banished from the world. Now the dark lord Estoroth is back with a legion of Hell's unholiest fiends. Their mission – blood revenge!

Your brave band must recover the lost relics that alone can seal Estoroth and his infernal terrors in the Black Crypt (hence the title). So there you have it, short story time over.

As usual you start the game with four team members. These must be selected at the beginning. You have a choice of fighters, druids, wizards and milkmen. Well OK no milkmen, but I had you going for a second there.

The whole game is played in dungeons – 12 of them to be precise. Each member of your dungeon posse already has several items upon his/her person – one of these items is normally a weapon.

Obviously fighters will have much better weapons than, say, druids, but then again don't choose all fighters because who's going to mix the drugs and do spells – or is it do the drugs and mix spells? Sorry, I'm getting away from the point here.

Black Crypt plays rather like Dungeon Master in the way that you move about and the way that you fight.

I have to hold my hands up and admit that I found it very hard. Not hard to play, but hard to get anywhere.

The beasties are very nasty indeed. They have this disagreeable habit of creeping up behind you, and before you know what's going on, you've lost two of your brave adventurers.

Despite this annoying factor, I found Black Crypt quite fun to play. I don't know why – maybe because it is so well presented. That's one of the best things about Black Crypt – the graphics are amazing, all drawn beautifully in 64 colours.

The animation is top notch – even the doors are wonderfully animated. Dan spent about ten minutes just opening and closing a door – he was mesmerised.



Oh no, it's the old shield in the stone wall trick. Well don't think I'm falling for that one...

It says on the box that the game's got digitised sound effects, but all I heard were a few grunts and the sound of doors opening and closing (thanks to Dan). Maybe there are some fantastic sound effects in the later levels.

Overall, Black Crypt is basically Dungeon Master with knobs on. The level of difficulty might put a few of the less experienced RPG fans off, but for the conquerors of Dungeon Master and its ilk, this is definitely the game for you.

The graphics make it instantly likeable, and playability-wise you can't go far wrong. It's not a classic, but it's much better than some of the other rubbish on the market.

I'm off back down the dungeons now, not to play Black Crypt, but because that's where Amiga Computing put me when I'm not reviewing games.

I don't know why, but I don't half fancy some fava beans and a nice Chianti.

Jonathan

VISION

GGGGG

Corr, well sexy, know what I mean guv?

AUDIO

GGG

Average intro tune, sound FX aren't up to much, though.

PLAYABILITY

GGGG

Nice easy control system, but it's not for the beginner.

ADDICTION

GGG

Fairly addictive, but difficulty level might put you off.

85%



Cor what a fantastic line up, and doesn't Geoff Capes look well 'ard?



A big disgusting salivating two-headed monster. It's just like Paul Austin first thing in the morning...



Eye, eye what do we have here... Excuse me while I faint, thank you



Is that a key I see before me? It is ya know, well it must be my lucky day...



Oh schoob, it's a, a, err, well whatever it is, it's flippin' scary. I'm off...



Well it's not lemmings, so what is it?

ORK

PSYGNOSIS ▪ £25.99 ▪ 1/2 meg ▪ Joystick ▪ Out now

Ork, – what a name! What you don't know is that the word "ork" doesn't actually mean anything and – more surprising – that it isn't related to the game in any shape or form.

The main character isn't called Ork, there isn't a planet in the game called Ork, the evil baddie isn't called Ork, so why call a game Ork?

Why not, I say! It's better than Mabel or Edith, after all. Ork is one of those words that you can put almost any letter in front of it and make a new word from – fork, pork, cork, dork, mork, york and errr gork – well that's quite a few, anyway.

I'm sorry, I'm definitely losing it – it's just that when I see a game with a totally pointless name I crack up and can't control myself.

Ahem. Anyway, you play the part of Ku-Kabul, a Heyadahl (that's his race, not a foreign swear word), and you're training to be captain of a star cruiser.

Ku-Kabul has reached the end of his training and he now faces the final test. Other Heyadahls have taken the test, some have passed while most have never been seen again.



No-one knows what Ku-Kabel has to do except his examiners. Armed only with basic twin cannons and an empty jet-pack, Ku-Kabel has to go to the planet Ixion to complete his training by passing the feared final test.

The best way I can describe Ork is to say that it's a cross between The Killing Game Show and Shadow of the Beast. Now Psygnosis are famous for producing games with brilliant graphics and sound, but they always seemed to forget one thing – playability.

In the case of Ork, they seem to have rectified the problem because there's more playability than you can shake a stick at. Ork's got really nice graphics, even if it looks as though most of them were ripped from Shadow of the Beast.

On the sound front there's a lovely little intro tune, but in-game there isn't a lot to shout and scream about. The sound FX are a little boring and don't really do anything for the game.

I think why Ork has succeeded and other Psygnosis games have failed is because Ork has the puzzle factor to it. Shadow of the Beast was just a fancy beat-'em-up after all and all there was to do was hit things and run around.

Ork, on the other hand, is a whole different kettle of fishies. The puzzle element means that you actually have to work out what to do, rather than just blasting baddies.

There isn't a lot that you can really complain about – it's one of those games that looks nice and plays well. However, it's lacking that certain something, if you know what I mean.

It doesn't really stand out from the rest. I mean, Lemmings had loads of little cute green-haired creatures that tried to commit suicide, but all you've got in Ork is a thing that shoots other things. I mean the main character looks like a mutant chicken!

Ork is one of Psygnosis' better games, but it's just not Gamer Gold material. I don't think the public will be rushing out to buy this one – they'll probably go for one of the big licensed games that's a load of rubbish, like they usually do.

Never mind, Psygnosis – there's always Lemmings 2!

Jonathan



Err excuse me, it's no time to be playing on computers, there's a big three-pronged beastie about to kill you...



Hello there, if I give you this gold will you let me through the toll? Yes? Oh thank you. What a nice man, a very nice man.

VISION ●●●●○
Nice graphics with more than a hint of Shadow of the Beast in them.

AUDIO ●●●○○
A nice little intro tune, but the sound FX do nothing for the game.

PLAYABILITY ●●●●○
A Psygnosis game that's playable? Don't make me laugh. No it's true, so there.

ADDICTION ●●●○○
You'll probably come back to it – it's one of those games to play on a rainy day.

80%

If you're not familiar with names like Orks, Gretchins, Dreadnoughts, Blips and Genestealers, then chances are you haven't been living for the past few years.

As any decent role-playing games fan will know, these names are all to do with Games Workshop Ltd. Now if you cast your minds back a year or so ago, you will remember that Gremlin converted Heroquest – The Board Game into Heroquest – The Computer Game (fanfare please!).

This obviously delighted thousands of RPG fans who owned Amigas. Now they've converted Space Crusade – a much loved RPG – to our computer screens too (hurrah!).

Anyone who's not a fan of RPGs will probably think that they're a little boring and involve lots of old, hairy heavy metal fans who move painted metal figures around a board while throwing a 75-sided dice.

Well you're wrong! I've played a few RPGs in my time, I can tell you, and they are actually quite fun. The only thing that bothered me were the hundreds and hundreds of rules that came with the game as standard.

You know the sort: "You can only kill an Ork if its kill points are below seven and its defence factor is above two, but if you own a Heavy Bolter you must throw three times to see if any shrimps have eaten your fridge."

Well it's sort of like that. Whatever it was, it was very confusing. So if you didn't know all the rules you consequently got beaten to a pulp by all your chums.

Well, now Space Crusade is on your home computer and things are a little easier. I'll tell you why shortly – first it's time for a bit of a story.

More than 25 millenia ago, mankind took his first tentative steps to the stars. The discovery of the warp drive was a major advancement for space travel. What was once a journey of several centuries became a journey of several days.

Warp space is the parallel universe through which starships may jump, but unfortunately it's also the domain of Chaos. In warp space nothing may be taken for granted. It is a universe filled with all manner of evil powers.



Ships have disappeared without reason and emerged from the warp centuries after they entered it, millions of light years from their destinations. These derelict starships, distorted beyond all recognition, are know as space hulks.

By entering warp space, man had awoken an ancient evil – the minions of Chaos had escaped from the warp. The first great war, known as the Age of Strife, had begun.

For over five thousand years, warfare wrecked mankind – nation battled nation, planet battled planet, race destroyed race. Colonies died out, while aliens plundered and grew fat on the wreck of humanity.

Then came a saviour, the man who would be know as the Emperor of Human Space. A shrewd diplomat, he gathered what was left of human society and formed it into the Empire.

A brilliant soldier, he conquered and reclaimed the planets lost to Chaos. For this task



Now I don't think red suits me, but I quite fancy that blue chapter


Look there's my posse, don't they look 'ard and well organised?


He's behind you!

Crusading in, err space, you've guessed it, here's...



SPACE

GREMLIN ▪ £25.99 ▪ 1/2 meg ▪ Joystick/mouse ▪ Out now

Tell me, are you feeling lucky, punk?

he crested the Space Marines, the greatest warriors of all.

Its members are acknowledged as the most powerful and feared fighting men in the Imperium. Space Marines are organised into chapters, each with its own fleet. The fleets roam through the galaxy in pursuit of Chaos. End of story...

Now this is where you come in. You get to control a squad of space marines – one commander and four marines – and you have to rid the space hulks of Chaos. The computer version allows for three players, each commanding one marine chapter – either the Blood Angels, the Imperial Fists or the Ultramarines. Chaos is played by the computer.

At the start of a game, the marine players choose the marine chapter they wish to represent. They then choose weapons for their marine teams.

There are plenty to choose from – assault cannons, missile launchers, plasma guns and heavy bolters are just some of those available.

The marines must then choose which mission they wish to undertake. This can range from blowing a hole in the side of a space hulk to taking on one of the deadly dreadnoughts. There are 12 missions to choose from, so it'll keep you busy for a while, plus there will be mission disks on the way soon. Once you've done all of this, it's time to start the game. The marine players take their turn first. After the marine team(s) have had their turn(s), it's time for the computer to strike back.



Take that you blighter!

GAMER GOLD

The marine players must attempt to accomplish the mission they have selected from the mission list. During their turn the marines may move, fire or fight using hand-to-hand combat.

As the marines explore the game map, they will encounter loads of the deadly members of Chaos. Marine players score points for eliminating their opponents and the player who scores the most points wins the game.

That's basically how you play Space Crusade – move in, kill the aliens, achieve mission objectives, move out and be home in time for tea.

Space Crusade is one of those games where the reviewer tells you to buy the game and read the manual because there are so many little things to talk about that he/she hasn't got enough space to write them all down.

Guess what? "What?" I hear you all cry. "Go and buy the game and read the manual because there isn't enough space to explain all the twiddly bits."

There you have it. I've hardly got enough space to tell you about the fantastic graphics and how you can switch views from 2D to 3D, or about the fab sound FX and how, errr, fab it sounds.

See, there just isn't enough space to tell you about the playability and how it's so easy to play because it uses a really good icon system and there are no hard rules to learn.

I can't believe I won't be able to tell you about how you'll be addicted to it for months and months on end. I don't know, computer game mags these days, tut tut.

Space Crusade is one hell of a game. RPG fan or not, you'll love it to bits. Go out and buy it today. You will not regret it, I promise.

Jonathan

VISION

Really fabbo graphics that look good in 2D or 3D.

AUDIO

OK tune and plenty of sound FX in game.

PLAYABILITY

Five out of five, it must be good.

ADDICTION

Highly addictive, plus the data disks are on the way.

91%



Cor look, it's a Chaos Marine with a, a very large g-g-gun...

CRUSADE



Maybe if I just stand here no-one will notice me...


Hey, weren't you in Jason and the Argonauts?

Snow business like snow business...

SUPERSKI 2

MICROIDS ▪ £24.99 ▪ ½ meg ▪ Joystick ▪ Out now

It's been a fairly quiet year for sporty games so far. There's been not so much as a peep or a whistle from the joystick-waggling fraternity, except for John Madden's Football. But fear not waggle fans, for spooky continental software blokes Microids are here to make your day with the release of SuperSki 2.

And before you ask, no I don't remember SuperSki 1 either. But by using some incredible powers of deduction I can guess that it probably had something to do with skiing, and it was presumably fairly super into the bargain. And, lo and behold, SuperSki 2 follows along similar lines.

You get to compete in six cold and frosty sporting japes, such as special and giant slalom, hot dog, ski jumping, downhill racing and bobsleigh. Quite how bobsleigh fits into a game about skiing I don't know, but who cares?

Especially when the bobsleigh is the best event of the lot. In fact, it's one of the most groovy little things I've ever played. Add a few more bobsleigh runs, and maybe an editor, and you've got an above-average game in its own right.

You see your bobsleigh from behind as it thunders down a twisting and turning track which should induce nausea in even the most strong-stomached among you.

As the scenery swings from side to side, and your sled goes flying round the bends, you're guaranteed to start swaying from side to side in your seat. Just like on Voyage to the Bottom of the Sea when the submarine gets hit by something. Wow.

And that's just one of the events. The downhill skiing bits are pretty much the same in design, but each requires different skills. The slalom, for instance, requires nifty steering to get through all the flags. On the downhill run you've got to go as fast as possible without flying off the course and straight into a tree. Each of these skiing sections plays very much like a driving game, but with the car replaced with some planks of wood nailed to your shoes.

The only events that don't quite work are the hot dog and the ski jump. The hot dog is the only simultaneous two-player event and requires you to ski down the screen, performing little jumps and fancy bits as you leap over piles of snow. More often than not, you'll just end up face first in the snow after an unsuccessful waggle. Too tricky for it's own good really.

And that's also the trouble with the ski jump. It's too fiddly, and you don't get enough time to make any adjustments. You shoot down the slope, and then have about half a nanosecond to keep your skier balanced in mid-air, otherwise he goes splat all over the ground. And this happened every single time I tried it. Ho hum.

Well, how does it all come together? Quite nicely as it happens. The graphics are just short of excellent, and the sound is quite stomping as well. Obviously a game of this sort is best enjoyed when you play against some mates, and even then you'll all get beaten by the computer players.

It leaves you feeling all humbled and small. And then you kick your monitor in, and feel much better about yourself.

In conclusion, the bobsleigh bit is ace, the skiing bits are a bit samey but still fun and the remaining two events are too tricky and stick out like the proverbial sore thumb.

There is a practice option, so you can try and get the hang of them, but I recommend that you just challenge your friends to a bobsleigh competition and scare yourself to death from the comfort of your own home.

Daniel



No. No. Anything but that. It's Jimmy Hill! Aaaaargh!



Keep that tummy trim with Jane Fonda's Sub Zero Workout



Half-way down the slope and already everyone's sucking a boiled sweet to stop themselves feeling sick



Hey! You can see my house from up here

VISION ●●●●○ (4/5)
Very slick. The bobsleigh is especially effective.

AUDIO ●●●○○ (3/5)
Nice tunes, but the FX are thin on the ground and very quiet.

PLAYABILITY ●●●●○ (4/5)
Most of the events are immediately playable and stonking good fun.

ADDICTION ●●●●○ (4/5)
A welcome change, which deserves to do well.

81%

American tourists ahoy, it's...

CASTLES



INTERPLAY ▪ £29.99 ▪ 1 meg ▪ Mouse ▪ Out now

The castle is surely one of the most stupid housing ideas in the world. They're cold, draughty, unhygienic and take years to build.

And then hundreds of years later, they fall to pieces and American tourists come and trample them to the ground in their loud Hawaiian shirts and take pictures of all the rubble because it's "quaint".

No, castles are not high on my list of great places to live. But here comes a game that promises to recreate the fun and excitement of building a castle, or three. All the joys of laboriously dragging huge chunks of stone across the country to construct a big, smelly castle.

In fact, I think the only reason people lived in castles was because they took so long to build that they had to live in them, or they'd have wasted half their lives building very big and heavy garden sheds.

So, can you make an exciting game out of such a dubiously entertaining subject? Well, almost. Naturally the rather sedate pace of such a task is going to startle the hardcore shoot-'em-up junkie, so if you feel that applies to you then go and paint your toenails or something.

On the other hand, if you're a more laid back kinda person who likes to ponder over problems and stroke your chin in a thoughtful, Jimmy Hill-type way, then stick around and we'll get stuck into Castles.

Well, to state the obvious, you've got to build castles. Rather easy, right? Well, in theory, yes it is. A bit of a drawn out process, but easy.

You just design the castle, making sure you stick loads of walls in for no good reason all over the place and silly towers just for a laugh, hire some peasants to actually build the thing for you, tell them which bit to start work on and leave them to it.

When they've finished, tell them to start work on another bit. And if you don't build the walls at the same rate, they become unstable and the whole thing crumbles to the ground. Not particularly tricky, and to be honest, it's too long-winded to be any fun either.

So, just to keep your regal mouse button a-clicking, there are a profusion of other kingly tasks for you to turn your attention to.

Recruiting and maintaining an army in case of attack is always important.

Keeping a close eye on your spending should prevent you running out of readies, and if by some stupidity you do run low (ahem, like I did) then just up the tax rate and take it from the little people.

And every now and then, you'll be approached by one of your subjects asking for some divine advice from your good self.

So Ethelred the Obscene has been bothering livestock again, has he? Will you let him off? Will you send some knights round to give him a kicking? Or will you have some of his more tender organs removed with a large axe? Decisions, eh?

Everyone knows that a good medieval king just chopped everyone up, and it's pretty good fun bellowing "off with his doodahs!" at the monitor.

You don't just make decisions concerning the private functions of your more dubious peasants, either. You could become embroiled in a scrap between two feuding dukes or something and have to prevent Civil War. Or you may be approached by a rival king who offers a truce. Do you trust him, or do you chop his head off? Exactly! You're getting the hang of it already.

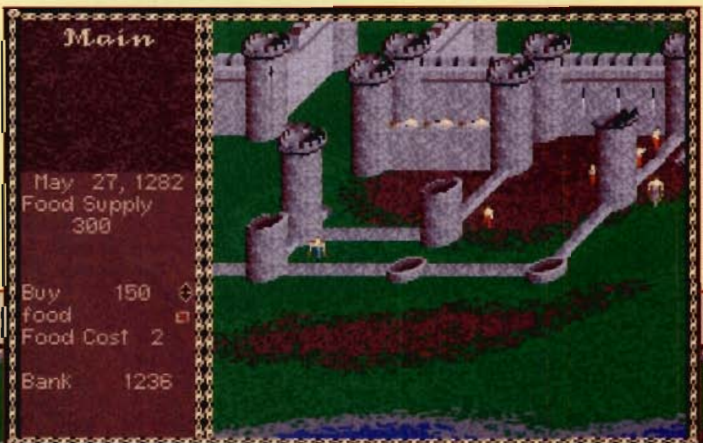
All the while, just keep an eye on how the castle's coming along. Give the little fellas a holiday now and again, make sure their pay is just enough for a scabby loaf of bread and some dead pig, and they'll be as happy as Larry. Whoever Larry is.

Inevitably, you'll come under attack and be forced to defend your half-built homestead. This is where the army comes in. Strangely enough.

You'll be given ample warning of where the enemy are attacking from, and then you get to arrange your archers in the towers of the castle, and along the walls, and set your infantry



Brian Blessed looks on in a disinterested way, while the tall one from the Bee Gees has a whinge



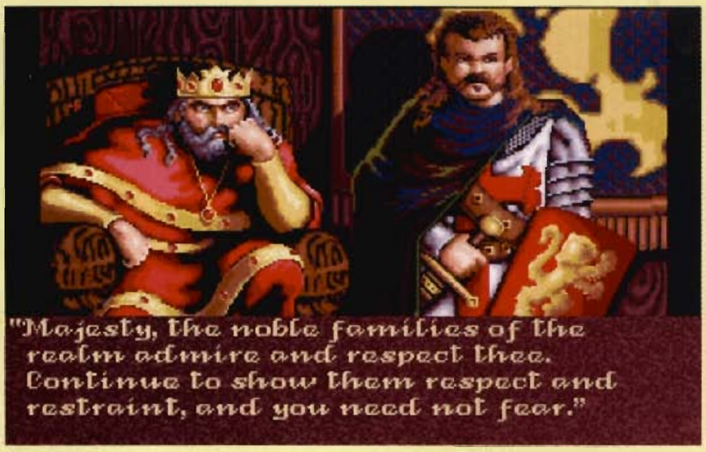
I suppose I'd better buy some food for the workers or they'll probably start moaning again, just like when I introduced the 24-hour working day



Here's my original castle design (note the stupid little wall at the top)



And here's my castle a few millennia later. Now watch some scumbag knock it down



The people trust me! Suckers! Double taxes all round, methinks!



Now, here's the perfect example of how not to build a castle. No walls, and some very short towers. Brilliant.



facing the enemy. When they're in sight, click on the infantry and watch them scuttle off to get beaten up while the archers do all the work and kill the enemy from afar.

If the enemy get close enough, they'll start to topple the walls and undo all your hard work.

The enemy also have another rather fiendish contraption. It's like a big tent on wheels full of dead pigs and stuff. They wheel it up to a part of your castle, usually one of the supporting towers, and then all the gas that builds up inside the pigs as they rot explodes and the wall collapses covered in bits of pig.

Very tasty. Who said chivalry was dead, eh?

After the battle, providing it wasn't a complete massacre, you start to repair the damage and mutter under your breath about what those dastardly Celts can do with their battleaxes.

And so it goes on until you've finished your castle, at which point you get to go to bed with a nice mug of Old Rumble's Gut Rot Real Ale and have a snooze in your new house. Probably (I couldn't actually finish my castle without running out of money).

Time to change into my Criticism Hat now, for a bit of nit-picking. First of all, it's slow. Not slow in a "badly programmed" sort of way, but slow in a "sit watching for 15 minutes while some stick men slowly build a wall" sort of way.

This means that it takes absolutely ages to build a proper castle, as they're usually made up of about 50 or so sections. Plus, and this really annoyed me, the manual doesn't actually contain instructions as such.

It tells you what to do in the form of a waffly tutorial all about some king or other being told how to play Castles by one of his chums. Very funny (not!) and very useful (double not!). This meant that for ages I was watching absolutely nothing happen and I had no idea why.

A simple step-by-step list of instructions would have made it so much clearer, but instead you have to wade through endless crap medieval puns to find out where you're going wrong.

Other niggles are the jerky scrolling, which makes the combat a real drag to watch and control, and the fact that it's sometimes hard to tell whether or not you actually did click on the options.

Some nice clear icons wouldn't have gone amiss. Still, even after these gripes, I quite enjoyed playing Castles. But it took a while. Let's just say that if you're looking for an instantly appealing game then you should run away from this screaming.

But if you like a bit of strategy with some building site-type bits bolted on, and you can ignore the sloth-like pace of it all, then this may suit you.

All in all, a nice idea that just doesn't work in the long run.

Daniel

VISION
GGG
Very nice stills, but jerky scrolling and dismal sprites.

AUDIO
GGG
Limited. An uninspired period tune warbles throughout.

PLAYABILITY
GG
Highly impenetrable at first, second and third glances...

ADDICTION
GGG
...but stick at it and you may find something rewarding.

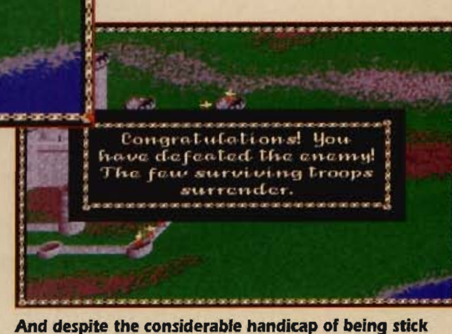
63%



Phew! The sweat and blood of all-out war splatters the screen as the stick men put the boot in



Huzzah! My little stick men march proudly into battle



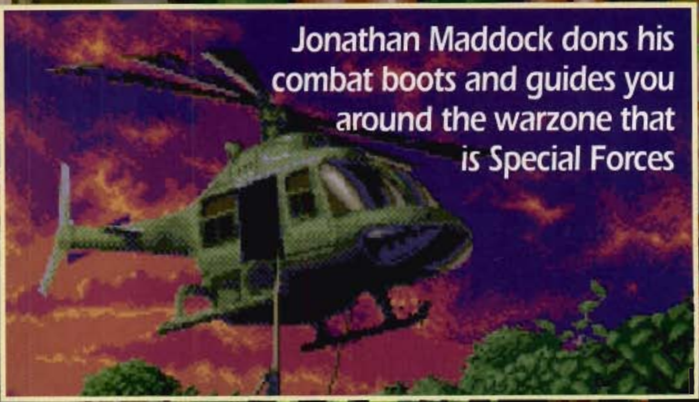
And despite the considerable handicap of being stick men, my lot win the battle! Amazing!

cheat mode

The Gamer gu

SPECIAL FO

Jonathan Maddock dons his combat boots and guides you around the warzone that is Special Forces



Before you go diving head first into the warzone, you need to know what your enemies are up to, so it's a short trip to the Missions menu.

The missions can be performed in any order, although if they are played in order a story will unfold and your actions during a mission will affect the next mission and so on and so on.

Once you've chosen your mission, read all the subsequent information. If you miss even one bit, you will undoubtedly mess up the mission.

Obviously it's better to start off at Conscript level because you will find that the enemy won't be as aggressive and there won't be as many of them. I don't really need to tell you that, but this is the ultimate guide, so I have to. Editor's orders, you see.

Weapons are next and they're very important indeed. If you are just practising then you need to take a wide range of weapons with you, so you know how they perform in the heat of the battle.

When the actual mission comes around, you will need to be very careful in choosing weapons. For example, if the mission requires you to blow up some fuel dumps, you will need some explosives – fairly obvious, but remember not to give just one man all of them.

Try if possible to share them out between the team – then, if one member of the squad gets captured or killed, you will still be able to complete the mission. If you select a stealth mission, remember to take weapons which are light, so you can move faster, and which don't make too much noise, because you wouldn't be





Five general playing tips by Norman Schwarzkopf

Stealth missions require extreme, err stealth, so a handy feature in Special Forces is the camouflage option. Depending on what level you are playing the game at, the enemy will find it very hard to spot you, but they will eventually find you.

It's best to use the peek-a-boo tactic which is to hide, wait for the guards to pass, run to another hiding place and so on and so on. Remember a team member can only camouflage himself if the surrounding terrain is suitable.

Another tip is to use the camouflage option while undertaking an attack mission. This time, camouflage your men, wait for the enemy to pass you by, then pop up and shoot them in the back. A bit underhand I know, but hey, that's Special Forces for you.

Diversions are very handy while doing any kind of rescue mission. By planting the remote controlled explosives a little way from the enemy guards then letting them off, the guards will move away from the prisoner leaving him more or less on his own. This gives you plenty of time to get the hostage and then the helicopter.

The most effective way to destroy enemy patrols and guards is to use trees, buildings and so on as a line-of-sight cover for your men.

You now have the element of surprise and it makes life so much easier because you can shoot the enemy before he can shoot you. It also saves on bullets because you're not firing all over the place.

One of the best tips I can possibly give you is the Blow the Bridges to Hell tactic. In some of the missions there are only one or two bridges. Set a remote explosive right where you start off, then make your way to the bridges, hide in camouflage mode and set the explosive off.

The enemy will run to see what the explosion was. Now plant explosives on the bridges, run across the bridge towards your mission objective and blow it up, leaving loads of enemy soldiers on the other side of the river and you with a much easier job to do.

In general, always keep your wits about you. Keep those eyes skinned for the enemy. Always check on how much ammunition you've got left and most important of all, keep checking where your men are if they get split up. Remember kids, it's war out there.

ide to

RCES

Mel Gibson's guide to weapons



1 Browning pistol

This is the stealthiest of all the guns, but unfortunately it has a slow rate of fire, so it's not very good when you're surrounded by the enemy.

Not bad to have as a secondary gun because it won't gain much enemy attention, it's light and you can carry up to a maximum of six magazines.

2 Grenades

Grenades will only destroy buildings, machine gun posts and enemy soldiers. They will attract a lot of attention. Ideal for making good distractions, but always use a soldier who's almost dead because once you've let them go, the enemy will be upon you in a matter of seconds.

3 LAW rockets

LAW Rockets will destroy all targets except for bridges. They must be used over a long distance as they need the distance to arm. They will attract the same amount of attention, so get ready to get out of there quick once you've let them go.

4 Sterling machine pistol

This is a rapid fire, high power, automatic weapon. It can fire 34 rounds every magazine, it's fairly light, but it makes loads of noise.

It's best used for an attack mission, but sometimes it's handy to have one on a stealth mission, because if you get found out and it's time to kick some butt, this is the ideal weapon for handling lots of enemy soldiers.

5 Lee-Enfield rifle

This is the best for sniping. It has a slow rate of fire, but is extremely accurate. Ideal for stealth missions, especially the assassination missions because you can pick your target off from long range.

6 Laser Target Designator (LTDs)

Essential for some of the later missions. It's a handy little device to designate targets for later airstrikes. It's entirely computer operated – all you have to do is leave it in the right place.

At a set time it will emit a laser beam which will allow any airstrike to be accurately pinpointed. Fairly light to carry – each member of the squad can carry a maximum of nine LTDs, which is more than enough.

7 Explosives

One of the best weapons in the whole game. You run into an enemy camp, set five or six or maybe 16, run out again to safety, hit the keyboard and Booom!

All the explosives are remote controlled, ideal for stealth missions because you can set them off at the end of the mission with out attracting attention to your squad.

8 Engager machine rifle

The heaviest weapon of them all, thus making your men very slow. It's a high power automatic rifle, just like a big brother to the Sterling machine pistol. It's more accurate then the Sterling, but just as loud. This gun should only be used on attack missions.

very stealthy if you started chucking grenades all over the place. Special Forces is one of those games that is easy to play as long as you use your common sense.

Once more, crush your mate's ego with...

INDY HEAT

STORM ▪ £24.99 ▪ ½ meg ▪ Joystick ▪ Out now

There's nothing quite like beating your friends to a pulp, is there? Not in the real sense, of course. Not in the "getting a big stick and hitting your friends repeatedly about the head with it" sense. That isn't clever at all. In fact, it's illegal.

What is fun is beating your friends to a pulp in the "being really, really good at computer games and embarrassing everyone by winning every time" sense. Now that is fun.

And, lo, the Software Houses did recognise this need to triumph over one's peers in the course of digitised entertainment. And, yea, they did create the Multi Player Option and it was good, and it did allow all and sundry to gloat and jeer at their friends who could not get the hang of the controls.

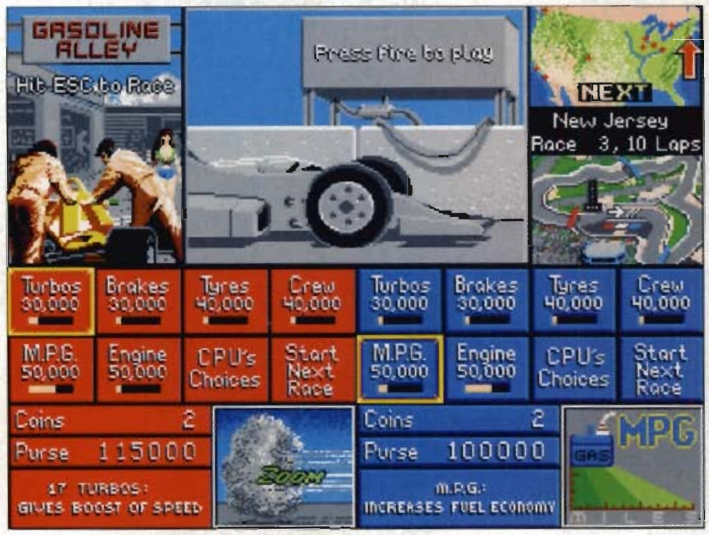
And, verily, everyone had a really good laugh with the exception of the kid that nobody really liked who had been lumbered with the dodgy joystick with the Fire button that didn't work.

And so we find yet another multiplayer extravaganza plopping into our collective laps. It's Indy Heat, in case you make a point of never reading the title at the top of the page, and it's quite good indeed.

But, and this is the big question that hangs over every multi-player game, is it any fun on your own? What if you've got no friends, or you live in the Australian outback? Is it worth shelling out for a game that's really only worth playing with other people?

Thankfully, in the case of Indy Heat, this problem doesn't occur. Even on your own, it's a rollicking little fella.

The basic idea is fairly simple. You take part in a series of races against three other cars, of which two can be controlled by other players. So, you've got four little cars hurtling round various tracks, each with its own torturous bends and niggly bits. And the idea is to complete a set number of laps before the others. Obvious really.



Don't forget to purchase a green strip for your windscreen that says "Trevor and Beryl" – it could be the difference between first and second place

Mind you, you'll have to take into account the technical specifications of your car. If you don't keep improving it by spending your prize money, then you'll find yourself running out of fuel or breaking down every two laps while everyone else keeps zooming past you.

And those aren't the only tactics you'll have to employ. If you really want to win, you'll have to play dirty. Smashing your opponents off the track isn't just fun, it's downright essential.

Another clever trick is to ram them up the bum while they're in the pits and send them flying back into the race with hardly any fuel. Arf arf arf. There's also the added bonus that you might kill a few members of the pit crew.

And while we're on the subject of silly little features, you can make it that bit more challenging by reversing all your controls. For masochists only...

The graphics are tiny, but this gives them a bit of extra zip, and means that the tracks can be more fiendishly designed due to the smaller sprites.

There are some nice "touches", as we say in the trade. For one thing, you can choose what your driver looks like, and you also get to see the little men in the pits running about and getting run over. Not graphically brilliant, but they do their job and look "groovy", as advertising person Simon Lees put it.

The sound's actually quite "groovy" too. As well as the little vroom noises, you also get some speech telling you when to pit for more fuel. Just when you're in the lead, you're guaranteed to hear a little voice say "Red Pit". Typical. There's also a fairly rockin' tune with guitars and stuff. Very pleasant on the shell-likes.

All in all, Indy Heat is a "nice" little game. Not outstanding by any means, but the sort of game that you'll come back to.

"Oh, I'm a bit bored. I know, I'll have a quick game of Indy Heat." That sort of thing. With only 11 tracks to get used to, it might not have much of a long term challenge, but it's a laugh all the same. Worth having, methinks.

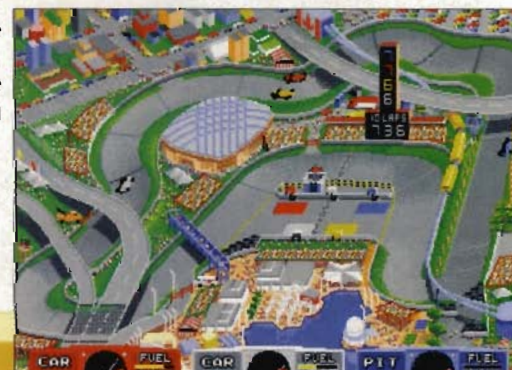
Daniel



A well-deserved victory for the unbearably sexy racing driver in red



Oooh, a bit of good-natured jostling by the pits there



You can never find a parking spot when you want one, can you?

VISION
Small, but cute and they do their job.

AUDIO
Reasonable. The speech is a handy addition though.

PLAYABILITY
Get a few mates to join in, and it's great. Alone, it's still good fun.

ADDICTION
Not really enough tracks, but you'll pop back to while away a few minutes.

81%





THE Short & FAT Gamer compo (not)

Yes indeedy, it's another Gamer compo and this time it's a long thin one. A new improved oblong shaped compo, in fact. And it's not just a compo either!

If you can't be bothered to post it to us, just cut it out and use it to teach youngsters the basic rules of geometry. You'll have to supply your own rulers and protractors though. A hundred uses, guaranteed!

On the other hand, if you fancy snaffling yourself a free copy of Gremlin's robust and fruity VideoKid, then simply fill in the form below, answer the almost illegally easy question, cut around the dotted line (kids, get some scissors to help you with this) stick in an envelope, and bung it our way addressed to the Short Fat Gamer Compo (Not) at our usual abode.

We've got 15 copies of said software sauciness to give away – that's about £300 worth – so you're in with a good chance of winning (providing only 14 other people enter).

Get your entries into our clutches by July 31 or we'll post them right back to you with a sarcastic sneer.

The editor's decision is final, and anyone who argues can step under the fighting tree. Employees of Gremlin or Europress can't enter, and neither can Noel Edmonds. Ha ha ha!

ENTRY FORM

Q. What video features little green monsters going bonkers at Christmas?

- **a) Brief Encounter** ☐
- **b) Gremlins** ☐
- **c) The Hip and Thigh Diet** ☐
- **d) Revenge of the Bonkers Christmas Monsters** ☐

Name ______________________

Adress ______________________

____

Telephone ______________________

Send your entry to: *The Short and Fat Gamer Compo, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP*



So just what is

EYE OF THE

US GOLD ▪ £35.99 ▪ 1 meg



My team, played here by the Banana Splits, prepare to enter Darkmoon



Disaster! Fleegle's dead! But can this spooky thing help?

What a clichéd world we live in. Everything comes and goes in such a predictable way. Take music for instance.

One minute everyone's wearing flares and listening to those Happy Monday fellas, and the next thing you know, it's all bleeping techno music, B&Q dust masks and Vicks vapo-rub (and you call that predictable? – Ed).

And what about computer games, eh? That is, after all, what we're hear to talk about. Trends come and go in this cosy little world as well.

There was, for instance, a time when Ultimate were the grooviest company on the planet and any game worth its salt was an isometric 3D arcade adventure. Unfortunately, people eventually cottoned on to the fact that all the Ultimate games were the same, but with different graphics. Bye bye Ultimate.

And then there are shoot-'em-ups. They never really went away, but I'm sure we're all familiar with the "lone spaceship against several billion enemy craft and a big end-of-level baddie"-type scenario.

Or how about the kidnapped girlie who sparked off a zillion beat-'em-ups? Or the ubiquitous cross country car race? Oh no! Total cynicism attack! Are there any new ideas left?

Probably not. And so we come to the very latest computer trend – the role-playing game. There are two distinct types. You've got the strategy-ish 3D version, like Space Crusade, Shadowlands, and Legend. And then you've got the "blimey, it looks like I'm actually there" type, like Dungeon Master, Eye of the Beholder, Elvira 2, Abandoned Places, Black Crypt, Knightmare et al.

And, well blow me down, just as the RPG bandwagon is picking up speed and all and sundry are leaping aboard, along comes the sequel to one of those original dungeony faves.

The trouble with the current overkill on RPGs is that there's very little imagination being used. Every single time, it's the same old story. Four adventurers battling it out deep in some dungeon or other, trying to vanquish some unpronounceable evil that's woken up with a bad attitude. It's nearly always the same story, it's always the same control method, and even the graphics look the same. It is, to be perfectly frank, getting a bit tedious.

However, each game is rather good, and that's the annoying thing. The same goes for Eye of the Beholder 2. It's chronically unoriginal, but it's also a splendid game in its own right. Let me explain...

EotB2 (as it shall be known henceforth to save my poor fingers) has all the RPG clichés you know and love. You select your characters, you name your characters, you fiddle with their attributes (ahem) and then you click on the direction arrows to move them around and on their weapons to attack. You cast spells, you find keys, you solve puzzles, and it's all very slick indeed.

The quest starts in a forest, and you must find your way to the Temple of Darkmoon and defeat the spookiness within. On your way to the temple you can hone your battle skills by beating up some wolves, and if you're lucky you'll find some hidden rooms with goodies in them.

Enter the temple, kill the religious nutters guarding the entrance and get adventuring. No surprises there really, although the forest section is quite a nice scene-setter and it does ease you into the game.

There's just not a lot you can say about EotB2 that hasn't already been said about any other RPG. Yes, it's got really good graphics and plenty of variety, from the forest to the swanky temple to the dingy dungeons, which add plenty of moodiness. The baddie sprites

Look out, it's Roxette with their deadly "rawk" singles! Or is it?



Just one of the many spooky and puzzling dead ends in Darkmoon





Oh no! The beard! It's a PC owner!

Making good use of the things that we find, things that the everyday folks leave behind...



BEHOLDER 2

GAMER GOLD

▪ Mouse ▪ Out now

are well drawn, but not very well animated and they tend to lurch towards you. A pity, but not terribly important as the overall "feel" of the graphics is very atmospheric and spooksome.

The sound is good too, if a little sparse, and complements the mood generated by the graphics. The ominous "it's behind yoo–oo" footsteps are particularly worrying and they genuinely make you feel uneasy as you prowl the corridors under the temple.

Some grinding noises for doors and levers, and some grunts and moans for combat just about make up the rest of the FX, but they do their job in a vaguely inoffensive way.

The playability is the tricky bit. There are so many similar games around at the moment that you've really got to judge them against each other to find the best. And I've done that, and on reflection I think that EotB2 is probably the best RPG so far.

All the others are certainly worthy of Gamer Golds on their own merits, but while this one just does the same old things as the rest, it does them with a style and atmosphere that actually makes it an exciting game to play.

There are problems though, not least of which is the way that combat becomes very stilted with more than two baddies on-screen. Selecting spells and swapping members of the party takes up too much time and you often get beaten to death as a result.

It's also a fairly linear game, at least as far as I can get. You solve this puzzle which reveals a key which opens a door that reveals a baddie who leaves behind another key when killed which opens a door that leads into another puzzle. That sort of thing. This means that while you get a good feeling a progress, you also start to wish for a bit more freedom to explore by yourself.

On balance, Eye of the Beholder 2 is the best RPG around. If you've already got an RPG then think twice about whether you want another just yet, but if you're still pondering over which one to buy then I'd recommend this one. Hardly original, but there's life in the old dog yet. Just.

Daniel



Oh no! It's the PC owner again!



Always ready to welcome a small, scantily-clad dwarf into the party. Welcome aboard, you chirpy wee fella

You don't fool me. You're Jimmy Hill with a comedy moustache



VISION GGGGG
As usual with RPGs, you get slick and atmospheric presentation.

AUDIO GGG
What there is is very good, but there's really not enough of it.

PLAYABILITY GGGGG
Not really suitable for beginners, but easy enough to get to grips with.

ADDICTION GGGG
If you're not already plodding through another RPG, this'll keep you off the streets for a while.

93%



B17 Flying Fortress

Microprose are changing their style radically for their next big release. It's a flight sim. Blimey. Daniel Whitehead says "What ho..."

In their seemingly endless quest to simulate every conceivable form of transport on the planet, Microprose are currently beavering away down in rural Tetbury to bring you high flying Hun-bashing with the B17 Flying Fortress. So what's it all about, eh? Let's find out...

Well, for starters let's discover exactly what the B17 is. A quick peek through the Eye Spy book of Aeroplanes (and the Microprose press release) tells us the following handy facts about the big cuddly ball of fun that is the B17 Flying Fortress.

The B17 is the great big chunky bomber that the Americans used in the Second World War. You've seen the film Memphis Belle? That was a B17.

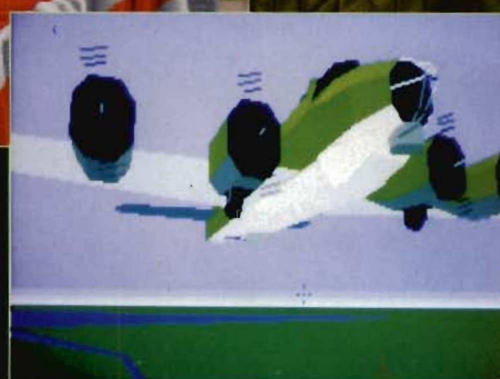
And did you see that Steven Spielberg's Amazing Stories on BBC1 about a bomber with Kevin Costner in it? That was a B17 as well. The bomber that is, not Kevin Costner. They're very similar but a B17 would've been more convincing as Robin Hood (a little bit of satire for you there).

Getting back to the matter in hand. For defence the B17 is covered in little gun turrets that spun around and shot the nasty Nazi planes down (and more often than not, they shot their own wings off and other stupid things like that).

Rather astonishingly, these gun turrets only held enough ammunition to fire for two minutes. Considering the missions went on for slightly longer than that, the gunner's job was not an enviable one.

The B17 is also quite a large plane. Hence its nickname, Flying Fortress. They flew in squadrons from American airfields down in East England, chugged across the skies to Germany, dropped lots of bombs willy-nilly, and then flew back in time for a cup of coffee, the rock 'n' roll barn dance and a bit of snogging with the local lasses while their husbands were getting blown up in France. What a life.





Of course, things weren't quite as easy as that. I may have skimped a bit on the flying bits. The idea of chundering through the skies in a wobbly sardine can, while smaller and faster enemy fighters zoomed all around you going "akka akka akka" and "die Englunder scweinhunden" isn't a lot of fun, really.

Even less fun was hanging in a see-through bubble on the bottom of the plane and being expected to shoot the enemy with a gun that ran out of ammo or jammed as soon as you touched the trigger. Mind you, there was always the snogging to look forward to, I suppose.

So, Microprose have taken it upon themselves to scrunch one













of these great, hulking war machines onto some floppy disks and let us experience the leather-clad thrill of flying one ourselves. And how have they done it? Here's how...

B17 will have all the usual flight sim trimmings that you'd expect from the 'Prose. There's a campaign framework to the missions, of which there are 25. After completing them, and providing the crew don't have any extra holes in their bodies, then you're allowed to retire and set up your own software house to make flight sims. Possibly.

The game also features some cute little touches that you won't find elsewhere. For starters, you get to choose which design you put on the nose of your bomber. You know, those sexy dolly birds who drape themselves all over the name of the plane. Like Bomber Bessie or, er, Edna.

Another quite groovy feature is that you can leap around the plane. Not in the physical sense of course, but you can jump from one crew member to another. So, if you get bored of just flying the plane, you can nip back and be the tail gunner for a bit. Or the bomber. Or the navigator.

And while you're doing this, the computer takes over the rest of the crew so you don't plummet to the ground just for taking pot shots from the belly gun for a laugh or get shot to pieces 'cos your gunners are all asleep.

This means that you can play the game in loads of different ways. You can spend the whole mission locked in one of the gun turrets, or you could be in charge of the actual bombing. You can be responsible for navigating the plane, or you can be a traditional old boffin and fly it.

Or if you reckon you're really really hard, you can nip from one crew member to another and do absolutely everything.

I managed to wangle a go on an early demo of the PC version and the air battles are quite apocalyptic. Each plane that gets hit starts to belch thick black smoke from its engines. You can then follow it down until it crashes into the fields miles below.

Thankfully, Microprose haven't gone for the "total realism" option, so the guns have infinite ammo. A game where you ran out of bullets after two minutes might be realistic, but it wouldn't exactly scream "playability" at you.

The sound effects were particularly beefy, with the thunder of the engines competing with the booming guns and explosions. Whether or not they'll be the same on the Amiga remains to be seen, but the overall effect is astonishing.

And the moment you've all been waiting for, when will it be in the shops? Well, the B17 will roll out of the Microprose hangar in June for the PC, and us Amiga fly-boys will only have to wait until August to get our hands on it. Remember, patience is a virtue.



3D frolics down in the dungeon

LEGEND

MINDSCAPE ▪ £25.99 ▪ 1/2 meg ▪ Mouse ▪ Out now





Aha! I wondered where he went

So that's what a Berserker rage looks like...



Warrior goes into Incredible Hulk mode and, er, well he kills everyone, really

"Hey, it's a Dungeons and Dragons ride". So began that stupid cartoon where five American brats and a poncey unicorn wandered around a vast land filled with dragons and monsters, and somehow never got killed.

And every episode they almost went home, but couldn't because they didn't want to leave the unicorn behind. Soft fools.

And did you know that the voice of that one with the shield was Ralph from Happy Days? Bizarre but true. He really went up in the world, didn't he?

I mean, trust the Americans to do a spin-off cartoon from a board game, of all things. Snakes and Ladders – The Movie, anyone?

In fact, they didn't just do a cartoon spin-off. No, we also got Dungeons and Dragons action figures (I know, I had one), D&D lunch boxes, and if you looked hard enough, you could probably find D&D yoghurt. And we also got the official D&D computer games. And by jiminy, they were boring.

No wonder everyone and their dog began trying to write a decent RPG for the home computer. And just our luck – they succeeded. Now we get a new one every month. In fact, this very issue contains no less than four games with a distinct RPG tang. And this is one of them.

Legend shies away from the traditional first-person perspective, and plumps for the isometric 3D approach, not unlike Shadowlands.

Oops, that's given the game away a bit. Legend is, it must be said, very similar to Shadowlands. But it's also better in some ways, and worse in others. Let me explain.

The plot is the usual dribble about four adventurers ridding the land of evil, so we'll skip that and go straight to the game itself. You start by defining your characters, as per normal, by changing their names and, hem hem, their sex if you wish.

Then it's onto a map where you move your party, as an icon, to different towns. Enter buildings, chat to locals, get clues and buy weapons. Simple. Eventually, the clues should lead you to an adventurers' guild where you must prove your worth in the cellar.

And thus we go into the RPG bit. Simply get your team through the cellar, and find a permit that will prove that you're a bunch of well 'ard warriors.

Along the way you'll have to master the art of reading and casting runes, pulling levers to open doors and, of course, killing loads of monsters.

So, what sets this game apart from the several million other RPGs on the market? Well, the spell casting is pretty in-depth. Rather than just finding spells and using them, you've got to use your magician to find scrolls, mix ingredients and read runes.

And it ain't easy. The manual helps you out plenty, but the whole magic bit is too daunting really and will put all but the most dedicated off. At least it's got spells in it, though.

The only really original option is the special powers that each adventurer has. Pressing F10 while selecting the appropriate bod will make them start doing whatever their particular forte is.

So for the magician it brings up the magic menu, while for the bard it brings up a list of magical tunes to play which will affect your team's attributes. The assassin becomes invisible and – this is my favourite – the warrior goes into a Beserker rage.

Which brings us quite nicely to the battles. Rather than just fighting one foe at a time, combat occurs when you stumble across a roving band of monsters. There can often be as many as five or six in a band, and all you have to do is press Enter and your team will get stuck in.

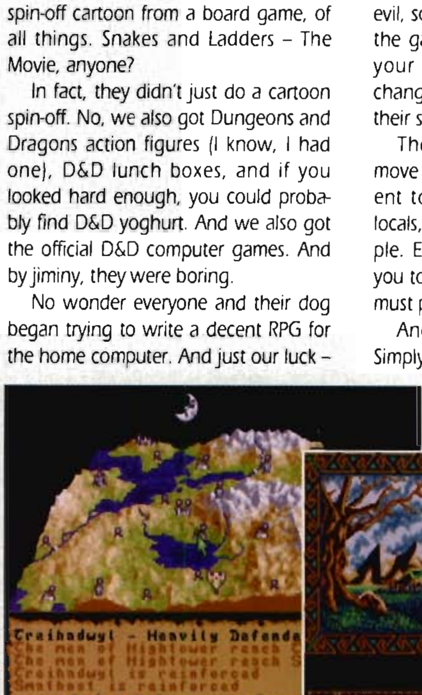
With all the special powers going it turns into a right big scrap and is really quite entertaining to watch.

Just put your feet up and chuckle as the warrior goes bonkers and squashes the enemy with a single blow. Arf arf arf. The only trouble with Legend is that it constantly reminds you of other games.

The map section is identical to the outdoors section of Abandoned Places, the indoors bit is Shadowlands, the AutoMapping appears in Black Crypt and the spell mixing also appeared in the first Elvira game.

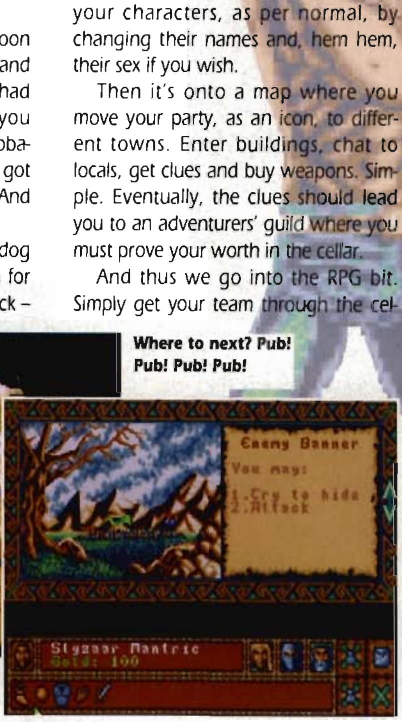
It's not quite as good as any of those games, but an enjoyable little chestnut for all its shortcomings. If you want a slightly more accessible RPG than Shadowlands, then this could be the one for you.

Daniel



Oh god. Ramblers at three o'clock. Thermos at the ready..

Where to next? Pub! Pub! Pub! Pub!



VISION – 5/5
Clean, colourful sprites with plenty of detail which lend a good atmosphere.

AUDIO – 4/5
The bard will play any of eight tunes, and some nice FX crop up too.

PLAYABILITY – 4/5
Easy point and click interface, although magic can be a bit tricky.

ADDICTION – 4/5
Like any good RPG, it'll keep your attention, but do we need another one?

86%


Mad about the boy!
(...and the NES...and the SNES)
The wait is over...
only 99p
AMAZING FIRST ISSUE OFFER!
free* ODEON CINEMA TICKET WORTH £3.75!
* WHEN ONE OTHER TICKET IS PURCHASED
When the g gets tough tough get N
N-FORCE
THE UNOFFICIAL ACTION MAG FOR NINTENDO GAME FREAKS!
N-FORCE is an independent magazine and is not connected with Nintendo of America Inc.
CARNAGE FOR CASH IN...
SUPER SMASH TV!
MARBLE MADNESS
SEE US AT THE FORCE FIELD PLAZA
THE 6th International COMPUTER SHOW
Incorporating the 16 Bit Computer Show
JULY 10th - 12th 1992
MORE SNES, NES AND GAME BOY STUFF THAN YOU CAN HANDLE AND THEN SOME!
THE ACE OF N-FORCE — MO
THE GRAND NATIONAL! PL
INTERSTELLAR ASSAULT
LISTEN TO FORCE FIELD EVERY WEDNESDAY ON
ATLANTIC 252
MORE MUSIC RADIO

WARNING! PARENTAL DISCRETION ADVISED

LEISURE SUIT

SIERRA ▪ £34.99 ▪ 1 meg ▪ Hard drive

Yes that poncing pervo is back! Larry Laffer hits your computer screens for a fourth time. Eh a fourth time, how can it be a fourth time when this is Leisure Suit Larry 5? Well my little pervsters, all will be explained... soon. First a little bit of history behind the man in the white polyester suit.

What can be said about Larry Laffer that is suitable to print? Oops, before this review gets too risky I'll have to do something.



Warning – as per usual this Larry game contains adult subject matter and parental guidance while playing the game is advised, so all you kids out there turn the page quickly and ignore the screenshots. Right, I'm now dealing with a mature adult audience.

Larry first appeared on the Amiga games scene a couple of years ago in Land of the Lounge Lizards which involved Larry trying, err, well, to put it bluntly, to sow his wild oats.

Larry 2 was titled Looking for Love in Several Wrong Places which had Larry trying to escape a spy-infested tropical jungle and trying to thwart the plans of the evil Dr Nonookie as well as sowing his wild oats (again!).

The third game in the series starred not only Larry, but a certain woman who features heavily in Larry 5 – Passionate Patti. Subtitled Passionate Patti in Pursuit of the Pulsating Pectorals, Larry again had to sow his wild oats while Patti had to rescue him from man-eating cannibal Amazon women.

Now to be honest, the Larry games aren't really that dirty. The first game was fairly smutty, but the sex scenes were fairly naff and you didn't see anything that you wouldn't see on page three of the Sun.

However, lots of people objected and the game designers made Larry 2 a lot less smutty, but – and this is a big but – everyone who bought and loved the first game complained to the game designers saying it wasn't smutty enough.

So lo and behold, the game designers made Larry 3 the smuttiest. The graphics and sound in the first three games were fairly rubbish, but now in Larry 5, Sierra have found a way to convert graphics from the PC, and it has wonderful graphics and mega sound.

Larry 5, which is subtitled Passionate Patti Does a Little Undercover Work, features Patti as a super-secret agent spy working undercover (and under the covers!) for the FBI.

Meanwhile, Larry is working a low-level job for a porno prime-time TV show, America's Sexiest Home Videos, and the mob is out to get pornography out of the living room and back onto the profit sheet.

Together, Larry and Patti must take on the mob, the FBI, the music industry and the United States Congress in a mix of sex, thuggery and rock 'n' roll.

What the hell happened to Larry 4, you might well be asking. Well the Gamer team still haven't completed Larry 5, but Larry keeps on remembering things throughout the game and wondering himself where Larry 4 has gone, so maybe all will be revealed at the end of this one!

The game can be controlled by mouse or joystick, but to be honest the mouse is the best option. It uses a new "click and grope" interface which makes the game easy to control – it also means that there's no typing to do. It's so easy – you click on the walk icon and then click on screen where you want to go and – voilà – Larry/Patti walks to the place you clicked on.

It's quite clever. Say you aren't doing very well – the computer will shout at you for being rubbish, but it might also give you a hint or clue on how to complete the part that you are stuck on or give you a friendly shove in the right direction.



It's the casino, time to win big money and go see the female mud wrestlers. I love this game...

The graphics in Larry 5 are fantastic. Sierra must have had a whole load of professional animators working on them.

In fact there were no less than 13 animators and seven background artists working on Larry 5, so we are talking Disney-type quality here. Soundwise? Well put it this way – a guy called Craig Safan composed the music for the game. Wow, I can hear you all cry. Well, Craig's work has included composing for the Cheers TV show.

He also composed movie scores for films like The Last Starfighter and A Nightmare on Elm Street 4 and many others, and has been an Emmy nominee.

So there you have it – a stonking



I quote: "I like the look of your hardware and with my software maybe I could download onto your hard drive." I didn't write it



Here we are in the arcade, perfectly normal apart from the naked women holding balloons, that is





guidance advised, it's...

LARRY 5



recommended ▪ Mouse ▪ Out now


That's an oddly shaped ice cream sundae, better take a photograph and send it in to That's Life...


Here we are in Patti's limo, but what on earth can she do with that fish?

soundtrack. In fact Larry 5 had over 60 people working for it, but hey!, the Americans always do things bigger and better.

Larry 5 isn't crude. Well OK it is crude, but not crude as in explicit sex scenes and bad language. It's crude as in sexual innuendo and double entendres. You don't actually see anything, but the implication is there. For instance when Larry is, erm, well let's put it this way, when Larry is getting a bit randy with a young lady under a table, all you see is the expressions on Larry's face. A lot of the humour is fairly childish, but it's not for children, if you know what I mean.

There's not really a lot else I can say about the infamous Larry Laffer and his white polyester suit, so I think it's time to end this review before I get into trouble from Mary Whitehouse. If you are a fan of Larry then this is the game that you've been waiting for. Even if you're not a fan, I'd strongly recommend buying Larry 5 anyway, because that's the kind of guy I am.

The graphics – as I've said before – are fantabulous, and the sound is brill, so I can't whinge on that front. What you do need is a hard drive. You can play it using two floppy drives, but it's really a waste of time and energy.

Even if you've got a hard drive, you still have to wait in-between "scenes" and at points the animation slows down to a snail's pace.

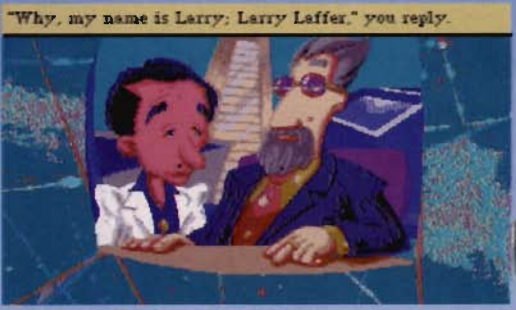
Forgetting all that though, Larry is still a damn fine adventure game and I would say the best yet out of the Larry series. If you want a smutty, sexy, outrageous adventure then Larry 5 is for you.

Right you lot, you can bring your kids back in now – we wouldn't want them to miss the rest of Gamer, would we?

Jonathan



Hurrah, this is what we want – schoolboy humour...



Here's Larry's boss Mr Scruemall, arf arf


Outside the airport and there's no sexual imagery anywhere. Drat


Oh look it's the mob, and just check out those comedy eyebrows



VISION
GGGGG
Sexy, and I really do mean sexy graphics – quite astounding

AUDIO
GGGG
Brilliant sound and there's even some speech dotted here and there.

PLAYABILITY
GGGG
The animation slows down at points, but it's still pretty mega.

ADDICTION
GGGG
Just the will to complete the game will bring you back for more.

91%



talking shop

ELSPA
PENGUIN
CHARTS • COMPILED BY GALLUP
SPONSORED BY PENGUIN BISCUITS

This month		Last month				
1	▲	NE	John Madden American Football	GAMER	Electronic Arts	£29.99
2	▼	1	First Division Manager		Code Masters	£7.99
3	▲	5	Project X	GAMER	Team 17	£25.99
4	▼	2	Rainbow Islands		Hit Squad	£7.99
5	▲	8	Space Crusade	GAMER	Gremlin	£25.99
6	▲	NE	The Manager		US Gold	£30.99
7	▼	3	Formula One Grand Prix	GAMER	Microprose	£34.99
8	▼	6	Scooby Doo and Scrappy Doo		Hitec Software	£7.99
9	▲	14	Lotus Turbo Challenge		GBH Gold	£9.99
10	▼	4	F16 Combat Pilot	GAMER	Action 16	£9.99
11	▲	NE	Manchester United		GBH Gold	£9.99
12	▲	NE	Eye of the Beholder 2	GAMER	US Gold	£35.99
13	▲	30	Golden Axe		Tronix	£9.99
14	▼	7	James Pond		GBH	£7.99
15	▲	19	Fantasy World Dizzy		Code Masters	£6.99
16	▼	13	Wacky Races		Hitec Software	£7.99
17	▼	16	New Zealand Story		Hit Squad	£7.99
18	▼	9	World Cricket		Zeppelin	£7.99
19	▲	NE	Shadow Warriors		Hit Squad	£7.99
20	▼	17	Jimmy White's Whirlwind Snooker		Virgin	£29.99
21	▼	12	Operation Thunderbolt		Hit Squad	£7.99
22	▼	20	WWF Wrestlemania		Ocean	£25.99
23	▼	10	Black Crypt		Electronic Arts	£25.99
24	▲	NE	Pinball Dreams		21st Century Ent.	£25.99
25	▲	26	Strider		Kixx	£7.99
26	▲	28	Robocop		Hit Squad	£7.99
27	▲	29	The Quest of Agravain		Code Masters	£7.99
28	▲	NE	Pacific Islands	GAMER	Empire	£29.99
29	▲	NE	Little Puff		Code Masters	£6.99
30	▼	11	Toyota Celica Rally		GBH	£7.99

Eight new entries this month, nine going up and fourteen going down. Touchdown! There is a new number one, and it's John Madden American Football by Electronic Arts.

Dan's tip for the top – Project X – continued to improve it's position by shooting up a couple of places and now finds itself at number three. Other notable new entries this month include The Manager by US Gold and Eye of the Beholder 2 by US Gold (again!). Pinball Dreams by 21st Century Entertainment makes the chart at long last.

Those bothersome budgets still plague the chart with 19 games compared to the full prices' eleven. Quite a few games disappeared from the chart this month. It's goodbye to A320 Airbus which will break quite a few hearts including our stewardess-loving news editor John "Come up and see my afterburners, girls" Butters.

It's also bye-bye to Harlequin which was my prediction for the top last month, but hey I'm only human after all (I beg to differ – Ed). It's tatty-bye to Shadowlands, that great RPG from Domark – I'm surprised that didn't do well.

Well it's time for those predictions. Dan the Ed has thought long and hard about his prediction and has chosen John Madden American Football to stay at number one for another month.

Well that's not very exciting is it readers, so I've chosen Eye of the Beholder 2 to rise up out of the dungeons and claim the number one spot, although I still think Project X might be in there with a shout.

Well I wonder whether I've got enough space this month (remember I ran out of space last month) to tell you about the chicken and the celery incident? Wow I've still got a few words left. Well the chicken goes into the barn and what does it see, but a wet stick of celery. The chicken starts clucking and grabs the celery and...damn I've done it again.

Jonathan

EAGLE SOFTWARE

118a Palmers Road
New Southgate
LONDON N11 1SL.

(10 am - 6pm 6 days)

Tel: 081-361 2733/5730
(2733 Faxline after 6pm)

FREE MYSTERY GAME WITH ORDERS OVER £50

Access VISA

ST & AMIGA BUDGET TITLES UNDER £10

Title	Price	Title	Price	Title	Price
1 Meg Cricket (Amiga only)	£4.99	Fantasy World Dizzy	£5.99	Platoon	£5.99
3 Stooges	£6.99	F16 Combat Pilot	£7.99	Predator	£6.99
3D Pool	£6.99	Gauntlet II	£6.99	Rambo III	£6.99
Afterburner	£6.99	Ghostbusters II	£6.99	Red Heat	£6.99
Altered Beast	£6.99	Ghouls'n'Ghosts	£6.99	Resolution 101	£6.99
Arkanoid (Amiga only)	£4.50	Golden Axe	£6.99	Road Blaster	£6.99
Arkanoid II	£6.99	Hard Drivin'	£6.99	Rocket Ranger	£8.99
Baal	£5.99	Head over Heels	£6.99	R-Type	£6.99
Barbarian	£5.99	Hitch Hiker's Guide to Galaxy	£7.99	Run The Gauntlet	£6.99
Barbarian II	£6.99	Hong Kong Phoey	£6.99	Shadow of the Beast	£6.99
Batman The Movie	£6.99	IK+	£6.99	Sherman M4	£6.99
Beach Volley	£6.99	Impossible Mission II	£6.99	Shinobi	£6.99
Blood Money	£6.99	James Pond	£6.99	Shuffle Puck Cafe	£6.99
Cabal	£6.99	Jet Set Willy	£7.99	Speedball	£7.99
California Games	£6.99	Kid Gloves	£5.99	Strike Force Harrier	£6.99
Carrier Command	£8.99	Last Ninja II	£6.99	Stunt Car Racer	£6.99
Celica GT4 Rally	£6.99	Licence to Kill	£5.99	Super Hang On	£6.99
Centrefold Squares	£6.99	Lombard RAC Rally	£6.99	SwitchBlade	£6.99
Cloud Kingdom	£6.99	Manic Miner	£7.99	Teenage Mutant Turtles	£6.99
Colossus Chess	£6.99	Michael Jackson Moonwalker	£6.99	Thunderstrike	£6.99
Conflict in Europe	£7.99	Moonshine Racers	£6.99	Toobin'	£6.99
Continental Circus (ST only)	£4.99	New Zealand Story	£6.99	TV Sports Football	£7.99
Defender of the Crown	£7.99	Ninja Rabbits	£5.99	Vigilante	£6.99
Def of the Earth	£6.99	Nitro	£7.99	War Zone	£6.99
Deluxe Strip Poker	£6.99	North & South	£6.99	Waterloo	£6.99
Double Dragon I or II	£6.99	Out Run	£6.99	Wings of Fury (Amiga only)	£6.99
Dragon Ninja	£6.99	Operation Wolf	£6.99	Wizball	£4.99
				WC Leaderboard	£6.99
				Xenon II	£7.99

TOP TITLES	ST	AMIGA
Half Meg Upgrade + Clock	N/A	£25.99
World Series Cricket	N/A	£16.99
3D Construction Kit	£29.99	£36.99
A320 Airbus	£26.99	£26.99
Abandoned Places	£19.99	£19.99
Addams Family	£16.99	£16.99
Advantage Tennis	£16.99	£16.99
Agony	£15.99	£15.99
Air Support	£15.99	£15.99
Alien Storm	£16.99	£16.99
Alpha Waves	£16.99	£16.99
Altered Destiny	N/A	£21.99
Another World	£18.99	£18.99
AMNIOS	£15.99	£12.99
Amos (Easy)	N/A	£23.99
Amos 3D	N/A	£23.99
Amos Compiler	N/A	£19.99
Amos The Creator	N/A	£36.99
Aquaventura	£15.99	£15.99
Armourgeddon	£15.99	£15.99
Armourgeddon Upgrade	£10.99	£10.99
A.T.A.C.	£23.99	£23.99
ATOMINO	£12.99	£12.99
AWSOME	£12.99	£12.99
B17 Flying Fortress	£23.99	£23.99
Back to the Future III	£10.99	£10.99
Back to the Golden Age	£16.99	£16.99
BARBARIAN II (Psyg)	£12.99	£15.99
Bard's Tale III	N/A	£16.99
B.A.T. II	£22.99	£22.99
Battle Chess II	£16.99	£16.99
Battle Command	£15.99	£15.99
BATTLE HAWKS 1942	£8.99	N/A
Battle Isle	£18.99	£18.99
BATTLE MASTER	£19.99	£11.99
Battle Squadron	N/A	£7.99
Betrayal	N/A	£8.99
Big Run	£16.99	£16.99
Billiard Simulator II	£16.99	£16.99
Bike GP	N/A	£15.99
Birds of Prey	£23.99	£23.99
Blue Max	£19.99	£19.99
Blues Brothers	£16.99	£16.99
Boston Bomb Club	£16.99	£16.99
Buck Rogers	£19.99	£19.99
Cadaver	£16.99	£16.99
Cadaver - the pay off	£10.99	£10.99
Captive	£15.99	£12.99
Cardiaxx	£17.99	£17.99
CARTHAGE	£15.99	£12.99
Carve Up	£15.99	£15.99
Chaos Engine	£16.99	£16.99
Champion of the Raj	£9.99	£9.99
Chase HQ	£6.99	£6.99
Chase HQ II	£14.99	£14.99
Chuck Rock	£16.99	£16.99
Cisco Heat	£15.99	£11.99
C.Y's Air Combat	£20.99	£20.99

TOP TITLES	ST	AMIGA
Cohort	£20.99	£20.99
Combo Racer	£6.99	£6.99
Cover Girl Poker	£16.99	£16.99
Covert Action	£23.99	£23.99
Crazy Cars III	£21.99	£21.99
Crime Wave	£16.99	£10.99
Cruise for a Corpse	£17.99	£17.99
Darkman	£15.99	£15.99
Days of Thunder	£15.99	£8.99
Deliverance	£15.99	£15.99
Demoniak	£19.99	£19.99
Deuteros	£19.99	£19.99
Devious Designs	£16.99	£16.99
D/Generation	£16.99	£16.99
Disciples of Steel	£17.99	£17.99
Double Dragon III	£16.99	£16.99
Dr Dooms Revenge	£9.99	N/A
Dungeon Master/ Chaos	£15.99	£15.99
Dyna Blast	£20.99	£20.99
ELF	£15.99	£15.99
Elvira Mistress of Dark	£21.99	£21.99
Elvira II Jaws of Cerberus	£23.99	£23.99
Elvira the Arcade	£16.99	£16.99
Epic	£18.99	£18.99
Eye of the Beholder	N/A	£19.99
Eye of the Beholder II	N/A	£20.99
F14 Tom Cat	£18.99	£18.99
F15 Strike Eagle II	£23.99	£23.99
F117A Stealth Fighter	£21.99	£21.99
F19 Stealth Fighter	£19.99	£19.99
F29 Retaliator	£15.99	£15.99
Face Off - Ice Hockey	£15.99	£15.99
Falcon III	£23.99	£23.99
Fantastic Voyage	£23.99	£23.99
Fate of Atlantis (Adv'ture)	N/A	£17.99
Fate of Atlantis (Arcade)	N/A	£17.99
Federation of Free Traders	£6.99	£6.99
Final Blow	£16.99	£16.99
Final Fight	£16.99	£16.99
First Samurai/MgaLoMania	£20.99	£20.99
Flight of the Intruder	£16.99	£22.99
Floor 13	£19.99	£19.99
Football Crazy	£16.99	£16.99
Future Baseball	£16.99	£16.99
Fuzzball	N/A	£13.99
G-Loc R360	£16.99	£16.99
Gauntlet III	£16.99	£16.99
Global Effect	£16.99	£16.99
Godfather	£18.99	£18.99
Gods	£16.99	£16.99
Golden Shot	£16.99	£16.99
Graham Gooch Cricket	£21.99	£21.99
Graham Taylor	£19.99	£19.99
Grand Prix (Formula 1)	£23.99	£23.99
Gunship 2000	£21.99	£21.99
Hagar the Horrible	N/A	£15.99
Hard Drivin II	£15.99	£15.99
Harlequin	£16.99	£16.99

TOP TITLES	ST	AMIGA
Harpoon (1 Meg)	£19.99	£19.99
Heart of China	£24.99	£24.99
Heimdall	£23.99	£23.99
Hero's Quest (Gremlin)	£16.99	£16.99
Hill Street Blues	£15.99	£15.99
Home Alone	N/A	£23.99
Hook	£15.99	£15.99
Hudson Hawk	£15.99	£15.99
Hunter	£15.99	£15.99
I. Bothams Cricket	£19.99	£19.99
Indy Heat	£16.99	£16.99
Ivanhoe	£6.99	£6.99
Jack Unlimited Clipart	N/A	£10.99
Jaguar XJ220	£21.99	£21.99
Jahangir Khan's Squash	£8.99	£8.99
Jimmy White's Whirlwind	£19.99	£19.99
John Barnes (1 Meg)	£16.99	£16.99
John Maden's Football	£16.99	£16.99
Kick Off II (1 Meg)	£15.99	£15.99
Kick Off II (.5 Meg)	N/A	£14.99
Kick Off Winning Tactics	£9.99	£9.99
Kid Gloves II	£16.99	£16.99
Killing Cloud	£11.99	£11.99
KILLING GAME SHOW	£15.99	£12.99
Kings Quest IV	£14.99	N/A
Kings Quest V	£26.99	£26.99
Knight Mare	£16.99	£16.99
Knight of the Sky	£23.99	£23.99
Last Ninja III	£16.99	£16.99
Leander	£15.99	£15.99
Leisure Suit Larry II	£14.99	£25.99
Leisure Suit Larry III	£25.99	£25.99
Leisure Suit Larry V	£26.99	£26.99
Lemmings	£15.99	£15.99
Lemmings II	£15.99	£15.99
Lemmings - Data Disk	£13.99	£13.99
Lemmings - Stand Alone	£15.99	£15.99
Life and Death II	£20.99	£20.99
Lord of the Rings	N/A	£20.99
Lost Patrol	£15.99	£15.99
Lotus Esprit	£15.99	£15.99
Lotus Turbo Challenge II	£16.99	£16.99
M1 Tank Platoon	£19.99	£19.99
Magic Garden	£16.99	£16.99
Magic Pockets	£15.99	£15.99
Man Utd. Europe	£15.99	£15.99
M. Ditka Ultimate Football	£18.99	£18.99
Megatraveller II	£20.99	£20.99
Megatwins	£16.99	£16.99
Mercenary III	£20.99	£20.99
Merchant Colony	£20.99	£20.99
Microprose Golf	£23.99	£23.99
Midnight Resistance	£6.99	£6.99
Midwinter II	£23.99	£23.99
Mig 29 Fulcrum	£21.99	£21.99
Mig 29M Super Fulcrum	£19.99	£19.99
Might of Magic III	N/A	£19.99
Moonfall	£15.99	£15.99
Moonstone	£21.99	£21.99
Monkey Island	£15.99	£15.99
Monkey Island II	N/A	£25.99

TOP TITLES	ST	AMIGA
Mystical	£15.99	£15.99
Myth	£15.99	£15.99
Narc	£15.99	£15.99
Navy Seals	£15.99	£15.99
Nebulus II	£15.99	£15.99
Neighbours	£16.99	£16.99
Nightshift	£10.99	£16.99
ORBITUS	£12.99	£12.99
Operation Thunderbolt	£6.99	£6.99
Ork	£15.99	£15.99
Outrun Europa	£16.99	£16.99
Pacific Islands(T.Yankee II)	£20.99	£20.99
Pang	£15.99	£15.99
Paperboy II	£16.99	£16.99
Parasol Stars	£15.99	£15.99
Pegasus	£16.99	£16.99
PGA Golf Tour +	N/A	£20.99
PGA Courses Disk	N/A	£10.99
Pinball Dreams	N/A	£15.99
Pitfighter	£16.99	£16.99
Plotting	£15.99	£15.99
Populous II	£20.99	£20.99
Predator II	£9.99	£9.99
Prince of Persia	£15.99	£15.99
Puzznic	£15.99	£15.99
QUEST AND GLORY	£20.99	£20.99
Race Drivin'	£19.99	£19.99
Railroad Tycoon	£24.99	£24.99
Rainbow Islands	£6.99	£6.99
R.B.I. 2 Baseball	£20.99	£20.99
Realms	£20.99	£20.99
Red Baron	£23.99	£23.99
Red Zone	£15.99	£15.99
Renegade (Coin-op Hits)	£6.99	£6.99
Rise of the Drago	N/A	£24.99
Robin Hood	£16.99	£16.99
Robocod	£15.99	£15.99
Robocop	£6.99	£6.99
Robocop II	£14.99	£14.99
Robocop III	£15.99	£15.99
Rod Land	£16.99	£16.99
Rollin' Ronny	£15.99	£9.99
R-Type II	£16.99	£16.99
Rubicon	£15.99	£15.99
Rugby World Cup	£15.99	£15.99
R.V.F. Honda	£6.99	N/A
Secret of the Silver Blues	£21.99	£21.99
Secret Weapon Luftwaffe	£19.99	£19.99
Shadowlands	£20.99	£20.99
SHADOW OF BEAST II	£12.99	£12.99
Shadow Sorceror	£19.99	£19.99
Shadow Warrior	£15.99	£15.99
Shuttle the Sim	£29.99	£29.99
Silent Service II	£23.99	£23.99
Sim Ant	£22.99	£22.99
Sim Earth	£20.99	£20.99
Simpsons	£15.99	£15.99
Ski or Die	£16.99	£9.99
Smash TV	£15.99	£15.99
Space 1889	£20.99	£20.99
Space Ace II	N/A	£33.99

TOP TITLES	ST	AMIGA
Space Gun	£15.99	£15.99
Space Crusade	£16.99	£16.99
Space Quest I,II,III,or IV	N/A	£19.99
Special Forces	£23.99	£23.99
Speedball II	£15.99	£15.99
Spirit of Excalibur	£20.99	£20.99
Starglider II	£6.99	£6.99
Star Trek V	£16.99	£16.99
Starfighter II	N/A	£16.99
Stratego	£17.99	£17.99
Steel Empire	£20.99	£20.99
Strider II	£15.99	£15.99
Strike Fleet	£17.99	£17.99
Supaplex	£6.99	£6.99
Super Cars II	£15.99	£15.99
Super hero	N/A	£15.99
Super Off Road	£8.99	£8.99
Super Space Invaders	£16.99	£16.99
Supremacy	£20.99	£18 99
Suspicious Cargo	£16.99	£16.99
Swap	£16.99	£16.99
Switch Blade II	£15.99	£15.99
Terminator II	£15.99	£15.99
Test Drive III	£15.99	£15.99
Their Finest Hour	£19.99	£19.99
Their Finest Mission	£12.99	£12.99
The Manager	£16.99	£16.99
Thunderhawk AH-73M	£21.99	£21.99
Thunder Jaws	£16.99	£16.99
Tip Off	£16.99	£16.99
Titus the Fox	£16.99	£16.99
Toki	£14.99	£14.99
Total Recall	£15.99	£15.99
Turrican II	£7.99	£9.99
Twilight 2000	£23.99	£23.99
Ultima Martian Dreams	£20.99	£20.99
Ultima Underworld	£20.99	£20.99
Ultima V	£19.99	£19.99
Ultima VI	£20.99	£20.99
ULTIMA VII	£20.99	£20.99
ULTIMATE RIDE	£10.99	£10.99
UMS II	£23.99	£23.99
Under Pressure	£17.99	£17.99
UnReal	£16.99	£16.99
UN Squadron	£15.99	£15.99
Untouchables	£6.99	£6.99
Utopia	£20.99	£20.99
Vendetta	£16.99	£16.99
Vengeance of Excalibur	N/A	£19.99
Video Kid	£17.99	£17.99
Volfied	£20.99	£20.99
Vroom	£16.99	£16.99
War Head	£7.99	£7.99
White Death (1 Meg)	£19.99	£19.99
Wild Wheels	£14.99	£14.99
Wing Commander II	£19.99	£19.99
Wiz Kid	£15.99	£15.99
Wolf Child	£16.99	£16.99
WOLFPACK	£14.99	£14.99
W.W.F.	£15.99	£15.99
Ziltrax	£16.99	£16.99

MAX EXTRA only £17.99
Turrican II, ST Dragon, SWIV and Night Shift

BITMAP BROTHERS VOL 1 only £16.99
Xenon, Cadaver and Speedball II

NINJA COLLECTION only £13.99
D. Dragon, Shadow Warrior, D. Ninja

VIRTUAL WORLDS only £14.99
Driller, Total Eclipse, Castle Master, The Crypt

MIND GAMES only £14.99
Austerlitz, Waterloo, and Conflict in Europe

TNT 2 only £20.99
Hydra, Skull + Crossbones, Hard Drivin II, Badlands, and Stun Runner

QUEST FOR ADVENTURE only £23.99
Operation Stealth, Indiana's Last Crusade and Mean Streets

AIR COMBAT ACES only £18.99
Falcon, Gunship and Fightbomber

HOLLYWOOD COLLECTION only £16.99
RoboCop, Ghostbusters 2, Indiana Jones, Batman the Movie

BOARD GENIUS AMIGA only £17.99
Deluxe Monopoly, Deluxe Scrabble, Cleudo, Master Detective and Risk

SOCCER MANIA only £11.99
Football Manager II, Gazza's Soccer, Football Manager - W.C. Edition, Microprose Soccer

FALCON CLASSIC COLLECTION only £21.99
Falcon, Mission One, and Mission Two

SUPER HEROES only £17.99
Strider II, Indiana Jones, Last Ninja II and Spy who loved me

GRANDSTAND only £17.99
Gazza Super Soccer, Pro Tennis Tour, World Class Leaderboard and Continental Circus

2 HOT 2 HANDLE only £18.99
Golden Axe, Total Recall, Shadow Warrior, Super Off Road Racing

SUPER SIM PACK only £21.99
Int.3D Tennis Crazy Cars II, Italy 90 and Airbourne Ranger

AWARD WINNERS ONLY £16.99
Kick Off II, Pipemania, Space Ace and Populous

FLIGHT COMMAND only £13.99
Eliminator, Strike Force Harrier, Lancaster, Sky Fox and Sky Chase

4 WHEEL DRIVE only £20.99
Lotus Esprit, Celica GT4 Rally, Team Suzuki, and Combo Racer.

POWER PACK only £14.99
Xenon 2, TV Sports Football, Bloodwych and Lombard Rally

SUPER SEGA only £21.99
Super Monaco GP, Golden Axe, Crackdown, ESWAT, and Shinobi

BIG BOX only £15.99
Captain Blood, Tin Tin on the Moon, Safari Guns, Teenage Queen, Bubble Plus, Purple Saturn Days, Krypton Egg, Jumping Jackson, BoBo, Hostages

TEST DRIVE II COLLECTION AMIGA only £20.99
Muscle Cars, California Challenge, European Challenge, Duel, Super Cars

DOUBLE DOUBLE BILL AMIGA only £22.99
Tv Sports Football, Lords of the Rising Sun, Tv Sports Basketball, Wings

ACTION PACK only £15.99
Cosmic Pirates, Rotor, Maya, On Safari, Eliminator, Fast Lane, Sherman M4, Hostages, Targian, Colorado

CHAMPIONS only £13.99
Jahangir Khan Squash, Man United and W.C. Boxing Manager

MAGNUM 4 only £16.99
Afterburner, Double Dragon, Operation Wolf, and Batman Caped Crusader

RAINBOWCOLLECTION only £13.99
New Zealand Story, Bubble Bobble, Rainbow Islands

POWER UP only £16.99
Altered Beast, Rainbow Island, X Out, Chase HQ, Turrican

AIR, LAND, SEA only £23.99
FA18 Interceptor, 688 Attack Sub, Indy 500

Please make cheques and P.O.'s payable to *Eagle Software*. P&P is £1.00 per order in the UK. Orders under £10 please add 50p per item. Europe: add £3.50 per item. Elsewhere add £4.50 per item. If the title you want is not listed please *phone for prices*. Spring-Summer catalogue available - please tick box. ☐

Member No: ______ Computer: ______ Date ______

Title ______ Price ______
______ Price ______
______ Price ______
______ Price ______
P & P ______
Total ______

Name: ______
Address: ______
______
______
Postcode: ______ Tel: ______
Card No: ______
Exp Date ______
Access ☐ Visa ☐ Cheque ☐ P.O's ☐

Free Membership with First Order to all Our Customers

Visit our shop 539 HOLLOWAY RD, LONDON N19 4BT
Also available large range of hand portable cellular phones and accessories

Shop is independent of Mail Order. Prices may vary.

Explosive action, shaken not stirred

COVERT ACTION

MICROPROSE ▪ £34.99 ▪ 1 meg ▪ Joystick/keyboard ▪ Out now



How hard are you? Put in a bit of training to make it easy on yourself



Hang about! Who's the boss around here?

I gripped my Uzi tighter. My palms were sweating and my gloves felt sticky. I glanced over my shoulder. The motion detector was showing nothing, but I could have sworn something moved. The stun grenade booby trap was still intact. I went back to work.

The safe-cracking equipment did its job and I began to search through the papers. A name, a photo, a meeting place. I photographed them all for later use.

Carefully closing the safe, I moved across to the picture on the wall. I removed it from its resting



place and stuck the bug to the frame.

My informant had assured me that this was the building from which the Colombian Cartel were working. We knew they were up to something, but what? Telegrams had been traced, cash transactions were taking place, but what was it leading to?

My motion tracker showed a guard approaching from the south. I replaced the picture and took cover behind a desk. As the guard opened the door, my booby trap exploded.

The guard was hurled backwards in a cloud of smoke and flame. More guards were behind him.

As they charged into the room, I rose from behind the desk and raked my Uzi from left to right. The guards fired back, and a bullet thudded into my body armour.

Seconds later, and the guards' bodies were hidden out of sight and I was continuing my work, the alarm bells shrieking out a warning. Hard to believe that only one hour before I'd been soaking up the sun in Rio.

Blimey! It could almost be Anneka Rice on the Holiday programme, couldn't it? But it's not. No, surprisingly enough, that is exactly what you'll be doing when you play Covert Action.

Yep, it's Microprose's long-awaited spy simulator.

Well OK, it's not really a spy simulator. It's actually billed as a "techno thriller", but there's no sign of drugged-up ravers in dust masks, you'll be glad to hear.

In fact, it's quite hard to compare Covert Action to anything at all. It's actually, gasp, An Original Idea!

OK, so what do you do? Well, you take on the role of Max Remington, ace secret agent and inventor of that thing that shaves jumpers. And by the way, Max can stand for either Maximillian or Maxine, so there's none of this sexism nonsense here.

You'll be given your tasks by the CIA bossman (who looks alarmingly like ol' Gorby) and you've got to do them. But it's not that easy.

Rather than telling you what to do, the bossman just tells you that some terrorist organisation or other is getting a bit suspicious and you've got to find out what they're up to. How you do this is, more or less, entirely up to you.

You can tap into the phones of suspect organisations, and gain the info that way. You can follow enemy agents and find out who else is involved.

Or you can go for the obvious option and break into their buildings and have a rummage around to see what you can find. Slowly but surely you'll build up a case file on all the people involved in the operation. You'll now have to find out all you can about these agents. Who they are, who they work for, what their role in the whole affair is.

You'll also need to steal incriminating documents and decipher them to discover what they're up to, and also what their relation is to one another. Keep this up and you should be able to figure out what they're planning to do, and stop it.

To arrest an enemy agent you need to first find out where they are, and then break in. Search the building and you'll eventually find them sitting around.

If you're sure you know exactly how they're tied up in all the dirty dealings, then you can arrest them – otherwise they'll just walk away from the charges.

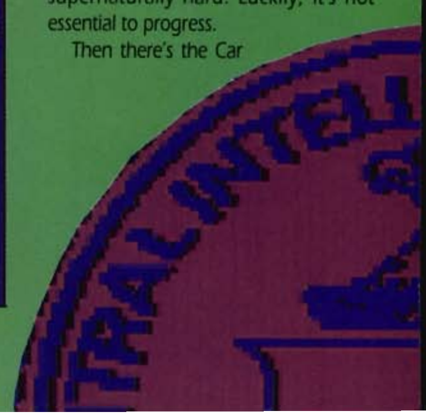
Work your way through the organisation and hopefully capture the Mastermind behind it all. Capture all the Masterminds from all the enemy organisations and you get to put your feet up at the taxpayers' expense. Phew!

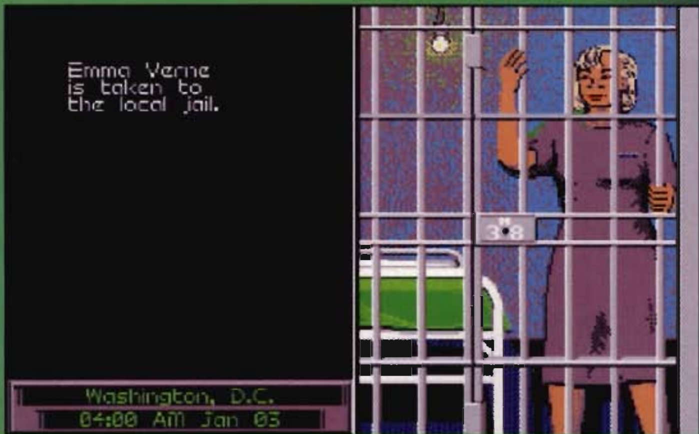
So, let's look at the four main sections in turn, shall we? First of all, there's Phone Tapping. This takes the form of a puzzly bit in which you have to cut of the flow of electricity to the phones without tripping alarms. And it's supernaturally hard. Luckily, it's not essential to progress.

Then there's the Car



OK, hold everything. This is the Furniture Police! Look at the state of this room!





You see Sheriff, she was dressing up as the ghost to scare everyone away from the treasure...



Rule one of spying – Never laugh at the ketchup on your boss's head

Chase section. This is, unfortunately, utter crap. It looks terrible and it's very hard to work up any excitement at all about it. Just watching some little blobby sprites chug round an unconvincing city map. Ho hum.

Now we come to Code Breaking. This bit is good fun, actually. Each letter in the coded message actually stands for a different letter, so A could really be F, for instance. Work out what each letter really is, and the message starts to take shape. Simple, but fun and rewarding.

And finally, the Combat/Break In section. This is the best bit of all. Pick your tools carefully from the inventory and then start to move through the building. Shoot guards, rifle through desks, crack safes, use gas grenades, set up traps – it's great.

The control system does seem a little strange at first, but it soon becomes second nature and you'll be leaping over furniture and dodging bullets with no trouble at all.

On top of all this, there's always the question of who's involved, and can you trust the local information? Should you arrest the enemies contact now, or later on? One wrong move and the rest of the operation goes into hiding and then you're really scuppered.

In short, Covert Action is massive. All the missions are interlinked, with all the enemy in cahoots and working towards some fiendish conclusion. Solve one mission, and you'll find that it leads on to the next. The whole thing slots together perfectly to create probably the first ever truly intriguing spy game.

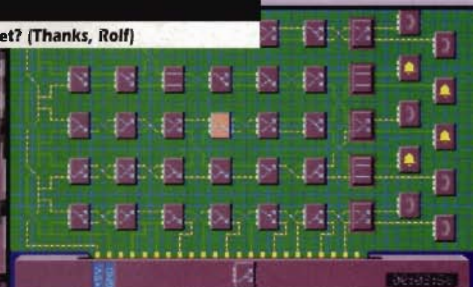
There are a few moans. The graphics are a bit on the dull side, and the fact that you have to photograph a file to see if there's anything of use in it is a pain. This means that you waste precious film just looking in empty desks and stuff.

But what the hell? Covert Action is by no means a perfect game, it's not even brilliant. But it is an interesting and novel change from the currently creaking RPG bandwagon. You'll know already whether or not it sounds like your thang. If so, investigate it!

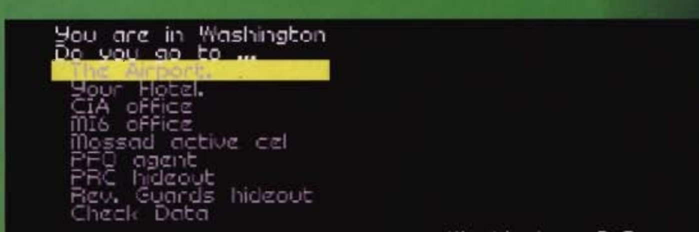
Daniel



Can you guess what it is yet? (Thanks, Rolf)



That "oh-so-easy" wire-tapping section. Whaaat?!



Ah, so much to see. I don't suppose there's a tour guide, is there?

VISION

Average in-game stuff, but some nice static screens.

AUDIO

OK tune, and suitable FX add that tense atmosphere.

PLAYABILITY

Initially it's a monster, but practice pays off.

ADDICTION

As one mission leads to another, you'll be drawn in!

87%

Always look on the bright side of life...



THE MANAGER

US GOLD ▪ £30.99 ▪ 1/2 meg ▪ Mouse ▪ Out now



Look at all these icons, I can't decide which one to click on next...



Oh decisions, decisions. Will Whelan be fit? Will Barnes demand more money? Will Burrows play as bad as last time? No wonder Mr Souness had heart trouble...

VISION
Good graphics that give the game that polished feel.

AUDIO
Not much apart from crowd cheers while watching the game.

PLAYABILITY
Nice easy icon system makes it great fun to play.

ADDICTION
Football fanatics may never put their Amigas down again.

89%

Yes, this is a joyous day for every football fan in the whole world. At last, a decent football management game.

Hurrah, thank God! Somebody, somewhere has got some brains left. This is the footy game computers have been waiting for.

Do you remember Football Manager on the Spectrum? What a footy game that was. Since then we've had rubbish football management game after rubbish football management game – well, apart from Player Manager, and even that was only an extension of Kick Off.

But now it's US Gold to the rescue with Software 2000's The Manager. The Manager is controlled via the mouse and an icon system, thus making it really easy to play, especially for the beginner or the non-football fan.

What is a bit unique about it is that four players can take part, which is a bit of a first for a football management game. There are three types of game – the one-year game, the three-year game or the unlimited time game.

The one-year option starts you off in Division One, giving you the chance to reach the top of the league by the end of the season.

On the other hand (or should that be foot?) there is the unlimited game which starts you off in Division Three, and first of all it's your duty to survive the dreaded drop, because if you don't it's game over, man.

Your team will start off being fairly rubbish, but as the seasons pass you will gain experience and slowly get better. As well as the FA Cup there are, of course, the European competitions, where you could find yourself battling against the giants of Europe like Juventus, Marseille and Inter Milan.

To be honest, I don't think one page is enough to describe all the options in The Manager, because there are literally hundreds of 'em. Well there probably aren't hundreds, but there's enough to give you a slight headache.

To give you a bit of an idea, I'll go over a few of them. Take the Training option, for example. You have to decide how intense you want the training and whether you want to train on tactics, shooting and so on.

You have to decide which training camp you want, which sponsors you want, what stadium improvements you require, whether you wish to raise ticket prices and all the time, not forgetting the cut-throat world of transfer deals and the important task of choosing the team.

Blimey, that's only about ten per cent of the game, so as you can see, The Manager is one hell of a huge experience. I haven't even got to the good bit yet – match day!

When Saturday finally comes round and it's time to get the lads out on the pitch to parade their skills (ooo-er) then it's time to admire the impressive 3D animation sequences.

This is what makes The Manager stand out from the other so-called "exciting" football management games. You actually get to watch the highlights from the match, you see all the goals, the near misses and even the complete "donkey" shots.

It gets quite intense at certain points and you find yourself in a football world of your own. Imagine – you need a win to go top of the league, there are ten minutes left... you find yourself screaming foul language at your players and it can get quite embarrassing!

The graphics are quite fantastic – they're very small, but because they are so detailed you can easily work out what's going on.

The atmosphere that this part of the game creates is unbelievable – if you're a true football fan then this is definitely for you.

I can't really think off anything bad to say about The Manager, other than that it might not appeal to a lot of people because off the time that you have to spend playing it.

Remember, it's a management game not an arcade game – if you want an arcade game then I suggest you buy Kick Off 2. The Manager is the ultimate football management game for the ultimate football fan – I loved it to bits.

On a sad final note, commiserations to Manchester United fans for their team losing the championship in such terrific fashion, and I'm not just saying that because I'm a Liverpool fan, arf arf arf.

Jonathan

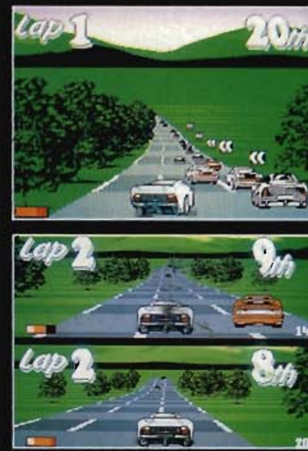


Yes, it's there. Liverpool put one in the old onion bag and I bet the other team are as sick as parrots





JAGUAR XJ220



Race your Jaguar XJ220 against other super cars including Ferraris, Porsches and Lamborghinis over thirty six circuits through twelve different countries. Speed through variable weather conditions whilst tackling waterfalls, tunnels, cliffs, bridges and mountain passes.

- *Fog, snow, wind, rain and sandstorms.*
- *One or two-player split-screen option.*
- *Joystick or mouse control.*
- *Map editor – Create your own circuits.*
- *Financial Management strategy.*

Will you run out of bottle before throttle?





Available on Atari ST and Commodore Amiga (both 1 Meg only).

Under licence of Jaguar Cars Limited, UK.

CORE

TRADEWINDS HOUSE, 69/71A ASHBOURNE ROAD, DERBY DE3 3FS.
TELEPHONE: (0332) 297797 FACSMILE: (0332) 381511

Screen shots taken from Amiga version

Access VISA

GHS TECHNOLOGY

TEL: 071 381 6618

AMIGA HARDWARE

NEW AMIGA 600

New Compact Design, 1Mb Ram as standard, Kickstart/Workbench V2.05, Built-in TV Modulator, Standard Smart Card Slot, Full Colour Composite, Video Output Plug, Includes Free Software

All this for only

£385

As above with 20Mb Hard Drive

£485

AMIGA 1500

2 x 3.5" Drives	Toki
1Mb Ram	Elf
Philips 8833 Mk II	Home Accounts
Platinum Works	Deluxe Paint III
Puzznic	Superboard Joystick

ONLY £799

COMMODORE CDTV

A new dimension in leisure living

- ★ Simple remote control operation
- ★ Plays new CD+G (Graphics) format
- ★ Plays audio CDs (8 x oversampling)
- ★ Supports Midi
- ★ Large selection of titles available and planned
- ★ Categories include: Education, Entertainment, Reference, Arts & Leisure, Music, plus more to come

All this for only £485

AMIGA 500

+ Cartoon Classics Pack

A500 with 1Mb Ram, TV Modulator, Lemmings, Bart Simpson, Captain Planet, Deluxe Paint III, Workbench v2.0, Mouse, with Free Superboard Joystick

All for only

£359.95

A590 20Mb Hard Drive	£289.95
A501 Ram Expansion/Clock	£129.95
Half Meg RAM expansion (with clock)	£45.00
Zydec 3.5" Drive	£69.96
A590 Hard Drive with 1Mb Ram	£349.99
A590 Hard Drive with 2Mb Ram	£389.99

BOOKS

Advanced Amiga BASIC	£18.95
Advanced System Prog Guide	£32.45
Amiga 3D Graphics Prog BASIC	£18.45
Amiga Applications	£16.95
Amiga Assembly Language Prog	£14.45
Amiga BASIC Inside and Out	£18.95
Amiga C Advanced Programmers	£32.45
Amiga C for Beginners	£18.45

GVP PRODUCTS

Series II 52Mb Hard Drive for A500	£379.50
Series II 120Mb Hard Drive for A500	£559.50
Series II 52Mb Hard Drive for 1500/2000	£279.50
Series II 120Mb Hard Drive for 1500/2000	£479.50
Digital Sound Studio for all Amiga's	£58.50

PRINTERS

Canon BJ10EX Bubble Jet	£239.95
Panasonic KX-P1124i Dot Matrix 24 Pin	£229.99
Panasonic KX-P1170 Dot Matrix 9 Pin	£129.99
Panasonic KX-P1624 Dot Matrix 24 Pin W/C	£349.99
Panasonic KX-P4430 Laser Printer	£749.99
Panasonic KX-P2180 Col 9 Pin Dot Matrix	£199.95
Panasonic KX-P2123 Col 24 Pin Dot Matrix	£249.95
Epson LQ860 Colour DOt Matrix 24 Pin	£589.99
Epson LQ1170 Dot Matrix 24 Pin W/C	£659.99
Star LC20 Dot Matrix 9 Pin	£169.99
Star LC200 Colour Dot Matrix 9 Pin	£229.99
Star LC24-200 Dot Matrix 24 Pin	£239.99
Star LC24-200 Colour Dot Matrix 24 Pin	£289.99

BOOKS

Amiga DOS Inside & Out	£18.45
Amiga DOS	£14.95
Amiga DOS Quick Reference	£8.95
Amiga DOS Ref Guide	£14.95
Amiga Desktop Video	£18.45
Amiga Desktop Video Guide	£18.45
Amiga Disk Drives Inside & Out	£27.95
Amiga For Beginners	£12.95
Amiga Guide Graphics Sound	£17.45
Amiga Graphics Inside & Out	£32.45
Amiga Hardware Reference Manual	£21.95
Amiga Machine Language Guide	£21.95
Amiga Machine Language	£14.95
Amiga Microsoft Basic Prog Guide	£18.45
Amiga Prog Handbook Vol 1	£24.95
Amiga Prog Handbook Vol 2	£23.95
Amiga Programmers Guide	£17.45
Amiga Programmers Guide	£20.45
Amiga ROM Kernel Ref Man Autod	£28.95
Amiga ROM Kernel Ref Manual	£29.95
Amiga ROM Kernel Librarys	£32.95
Amiga System Programmers Guide	£32.95
Amiga Tricks and Traps	£14.95
Becoming an Amiga Artist	£18.45

BOOKS

Beginners Guide to the Amiga	£16.95
Compute's First Book of Amiga	£16.95
Compute's Second Book of Amiga	£16.95
Elementary Amiga BASIC	£14.95
Inside Amiga Graphics	£16.95
Inside the Amiga with C 2nd Edition	£24.50
Kickstart Guide to the Amiga	£13.95
Kids and the Amiga	£15.95
Mapping the Amiga	£20.95
More Tips and Tricks for the Amiga	£18.45
Programmers Guide to the Amiga	£23.95

PROFESSIONAL SOFTWARE

3D Construction Kit	£34.50
3D Professional	£219.00
9 out of 10	£23.50
AMAS	£76.50
AMOS	£34.50
AMOS Compiler	£24.50
AMOS 3D	£29.50
Arena Accounts	£87.95
Big Alternative Scroller	£39.50
Broadcast Titler 2	£185.00
Comic Setter	£44.50
Deluxe Paint IV	£64.50
Deluxe Music Construction	£49.95
Deluxe Photolab	£54.50
Deluxe Video 3	£74.50
Desktop Budget	£37.50
Distant Suns	£37.50
E-Type	£19.50
GB Route	£39.50
GB Route Plus	£59.95
Hisoft Basic	£49.95
Hisoft Devpac V3	£49.95
Hisoft Extend	£19.95
Hisoft Pascal	£74.95
Home Accounts II	£39.95
Imagine II	£224.95
K-Data	£34.50
K-Spread II	£44.50
K-Spread III	£54.95
Mailshot	£24.95
Maxiplan Plus	£49.90
Music X JR	£49.95
Pagesetter 2	£44.50
Pagestream V2x	£189.95
Pen Pal	£64.50
Personal Finance Manager	£27.50
Powerworks	£75.00
Presentation Master	£199.00
Pro Vista 2	£89.95
Quarterback	£39.95
Quarterback Tools	£54.50
Technosound	£39.95
Transwrite	£29.95
X-Copy Professional	£39.95
Prodata	£69.95
Professional Page V2x	£159.95
Protext V5.5	£105.00
Quartet	£38.50
Starter Kit	£54.00
Superbase 4 Professional	£169.95
Superbase Personal II	£65.95
Superplan	£69.95
T.F.M.X.	£25.99
Videoscape 3D	£25.99
Vidi-Chrome	£14.95
Vista	£49.00
Vista Pro	£89.00
Vista Scapes	£42.99
Wordsworth V1.1 (1 Meg)	£84.95

LEISURE SOFTWARE

10 Great Games	£20.90
4D Sports Boxing	£17.90
4D Sports Driving	£25.90
5th Gear	£14.95
688 Attack Sub	£17.90
A Prehistoric Tale	£9.99
A10 Tank Killer New Version (1Meg)	£23.90
A320 Airbus	£26.50
Accolade in Action	£18.90
Agony	£15.90
Alcatraz	£17.90
Alien Legion	£14.95
American Dreams	£17.90
Armour Geddon	£17.90
Armour Geddon Update	£17.90
Atomino	£17.90
Autoduel	£15.90
Award Winners	£17.90
Award Winners (Compilation)	£17.90
Baal	£14.95
Backlash	£9.95
Bangkok Knights	£9.95
BAT	£18.90
Battle Command	£21.90
Battlechess II	£17.90
Betrayal	£24.90
Bill and Ted's Excellent Adventure	£14.95
Black Cauldron	£17.90
Black Crypt	£17.90
Black Lamp	£14.95
Blitzkrieg	£24.90
Botics	£14.95
Brides of Dracula	£17.90
Bubble+	£9.95
Captain Fizz	£14.95
Champions of Krynn	£21.90
Charge of the Light Brigade	£18.90
Charons	£9.99
Chessmaster 2100	£20.90
Chuck Yeagers Adv. Flt. Trainer	£17.90
Codename Iceman	£25.90
Colonel's Bequest	£25.90
Conflict in Middle East	£20.90
Conquest of Camelot	£26.90
Cricket (1 Meg)	£23.90
Curse of Ra	£18.90
Curse of the Azure Bonds	£21.90
Custodian	£9.95
Dark Castle	£14.90
Dark Fusion	£9.95
Datastorm	£9.95
Day of the Viper	£14.90
DNA Warrior	£14.95
Dragons Lair II	£14.95
Dragonscape	£9.95
Dungeon Master Editor	£9.95
Dungeon Quest	£9.95
Eco	£9.95
Eco Phantoms	£9.95
Elf	£9.95
Elvira II	£28.50
Enterprise (STFM only)	£9.95
Espionage	£14.95
Eye of Horus	£14.95
Eye of the Beholder	£20.90
E-Motion	£9.95
F19 Stealth Fighter	£19.95
F29 Retaliator	£17.90
Final Battle	£9.95
Final Command	£14.95
First Samuria and Megalomania	£20.90
Flight of the Intruder	£23.90
Full Contact	£9.95
Future Basketball	£9.95
Galaxy Force	£14.95
Garrison	£14.95
Genghis Khan	£28.50
Germ Crazy	£9.95
Go	£14.95
Gods	£17.90
Gremlins II	£17.50
Growth	£9.95
Gunboat	£23.90
Halls of Montezuma	£17.90
Harlequin	£17.90
Hate	£17.90
Hellbent	£14.95
Hellraider	£14.95
Hotshot	£9.95
Hound of Shadow	£17.90
Hudson Hawk	£17.90
Hydra	£17.90
Hyperforce	£17.90
Insanity Flight	£14.95
Intact	£14.95
Interceptor	£14.95
Ivanhoe	£17.90
Jet Set Willy	£9.95
Jimmy Whites Whirlwind Snooker	£19.90
Jumping Jackson	£14.95
Jupiter Masterdrive	£17.90
Kings Quest II	£23.90
Kings Quest III	£23.90
Kings Quest IV (1 Meg)	£23.90
Knightmare	£19.90
Knights of the Sky (1 Meg)	£23.90
Larrie and the 'Ardies	£9.95
Legend	£23.90
Legend of the Lost	£17.90
Leisure Suit Larry II	£26.90
Leisure Suit Larry III (1 Meg)	£26.90
Leisure Suit Larry V (1 Meg)	£26.90
Lemmings (Original)	£17.90
Lords of Chaos	£17.90
Lotus Turbo Challenge II	£17.90
M1 Tank Platoon	£19.95
Magicfly	£14.95
Manhunter II San Francisco	£23.90
Manhunter New York	£23.90
Matrix Marauders	£17.90
Megalomania	£20.90
Mercenary III	£24.90
Merchant Colony	£21.90
Microprose Golf	£23.90
Microprose Grand Prix	£23.90
Mig 29	£21.90
M.U.D.S.	£17.90
Might and Magic	£9.95
Mindbender	£12.95
Mindroll	£12.95
Moonshine Racers	£17.90
Mystery of the Mummy	£17.90
Narc	£14.95
Nightbreed	£9.95
No Excuses	£14.95
Oh No! More Lemmings	£17.90
Oh No! More Lemmings (Data Disk)	£13.99
Oops Up	£14.95
Operation Harrier	£17.90
Operation Stealth	£17.90
Orbit 2000	£17.90
Ork	£17.90
Pang	£9.95
Paperboy II	£17.90
PGA Tour Golf	£17.90
Photon Storm	£14.95
Pick 'n' Pile	£14.95
Pinball Dreams	£17.90
Plotting	£14.95
Police Quest I	£23.90
Police Quest II	£26.90
Police Quest III	£26.90
Power Up	£14.95
Powerboat USA	£17.90
PP Hammer	£15.99
Predator II	£14.95
Premiere Collection II	£19.90
Prison	£17.90
Purple Saturn Day	£14.95
Pursuit to Earth	£9.95
Pyramax	£14.95
Quadralien	£14.90
Quartz	£17.90
Quest for Glory II (1 Meg)	£26.90
Raider	£17.90
Railroad Tycoon	£23.90
Realms	£19.90
Red Baron (1 Meg)	£23.90
Red Storm Rising	£17.90
Resolution 101	£17.90
Rick Dangerous II	£17.90
Roadwars	£14.95
Robin Smiths International Cricket	£17.90
Roger Rabbit in Hair Raising Havoc	£17.90
Rotor	£14.95
Rubicon	£17.90
Saint and Greavsie	£14.95
Scorpio	£9.95
Secret of Money Island	£17.90
Shadowlands	£19.90
Sideshow	£14.95
Silent Service II	£23.90
Sim City	£14.95
Sim City/Populous	£19.90
Simulcra	£17.90
Slayer	£14.95
Sleeping Gods Lie	£17.90
Soccer	£9.95
Sorcerers Apprentice	£9.95
Sorcery Plus	£14.95
Space Crusade	£17.90
Space Gun	£17.90
Space Harrier II	£14.95
Space Quest II	£23.90
Space Quest III (1 Meg)	£26.90
Space Quest IV (1 Meg)	£26.90
Special Forces	£23.90
Spellbound	£14.95
Spherical	£9.95
ST Dragon	£17.90
Stalingrad	£17.90
Steel	£14.95
Storm Master	£21.90
Stryx	£9.95
Stun Runner	£14.95
Stunt Car Racer	£17.90
Super Off Road Racer	£17.90
Switch Blade II	£17.90
Team Suzuki	£17.90
Team Yankee II	£21.90
Terminator II	£17.90
Test Drive II: The Collection	£17.90
Test Drive II: The Duel	£17.90
The Bitmap Bros Vol 1	£17.99
The Power	£17.90
The Simpsons	£17.90
The Ultimate Ride	£17.90
Third Courier	£17.90
Thunderhawk	£20.90
Thunderstrike	£14.95
Tiger Road	£14.95
Time Machine	£17.90
Toki	£17.90
Tom and the Ghost	£14.95
Total Eclipse	£17.90
Tower of Babel	£14.95
Toyotes	£14.95
Twylyte	£14.95
Typhoon of Steel	£17.90
Ultima V	£20.90
Ultima VI	£20.90
UMS II	£23.90
Universe III	£17.90
Unreal	£17.90
Utopia	£20.90
Vaxine	£14.95
Venom Wing	£14.95
Venus Fly Trap	£14.95
Video Kid	£17.90
Viz: The Game	£9.95
Vroom	£16.50
Wanted	£14.95
War Hawk	£9.95
Warp	£9.95
Web of Terror	£14.95
Wings of Death	£14.95
Wings (1 Meg)	£23.90
Wipe Out	£9.95
World Championship Soccer	£17.90
W.W.F.	£17.90
Xenophobe	£16.90
Xybots	£16.90

NEW RELEASES

Air Support	£17.90
Air Warrrior	£23.90
Apidya	£17.90
Aquaventura	£17.90
Bonanza Bros.	£17.90
Borobodur	£17.90
Championship Manager	£17.90
D-Generation	£17.90
Dyna Blaster	£20.90
Fantasy Park	£17.90
Graham Taylor's Soccer Chal.	£17.90
Heart of China	£24.90
Jim Power	£17.90
John Barnes European Football	£17.90
Omar Sharif's Bridge	£23.90
Plan 9 From Outer Space	£23.90
Project X (1 Meg)	£17.90
Psyborg	£17.90
Sports Best	£17.90
Striker	£17.90
Tennis Cup 2	£17.90
Utopia Data Disk	£11.90
Winter Supersports '92	£17.90

EDUCATIONAL

Better Spelling	£18.99
French Mistress Level A+B	£19.95
Fun School II Under 6	£17.50
Fun School II 6 to 8	£17.50
Fun School II Over 8	£17.50
Fun School III Under 5	£17.50
Fun School III 5 to 7	£17.50
Fun School III Over 7	£17.50
Fun School IV Under 5	£17.50
Fun School IV 5 to 7	£17.50
Fun School IV Over 7	£17.50
Hooray for Henrietta	£17.90
Learn to Read with Prof 1	£29.90
Maths Mania (8-12)	£22.95
Mavis Beacon Teaches Typing	£20.50
Prof Looks at Words	£16.50

JOYSTICKS

Foot Pedal	£24.99
Freedom Connection	£19.99
Hyperstar	£16.99
Megaboard	£24.99
Megastar	£27.99
Quickjoy II Turbo	£8.99
Quickjoy Jetfighter	£13.99
Quickjoy Superboard	£17.99
Quickjoy Supercharger	£9.99
Stingray (Autofire)	£13.99
Superstar	£13.99
Topstar	£23.99

PERIPHERALS

Trackball (3 button)	£39.95
Cordless Mouse (rechargeable)	£49.95
Opto-Mechanical Mouse	£19.95
Naksha Mouse	£34.95
Golden Image Hand Scanner	£189.99
Amstrad SM2400 Modem	£174.99

GHS TECHNOLOGY LTD, 10 Fulham Broadway, London SW6 1AA
Tel: 071-381 6618 Fax: 071-381 0528
ALL PRICES INCLUDE VAT

Access

VISA

24hr Hotline 071-381 6618 Credit Card orders

To order: Phone us with your Access/Visa details or send cheque/PO with details. When ordering software please specify disk size – please allow 7 days for cheque clearance.

Check availability before ordering. Goods not offered on trial basis.

E. & O.E. Prices and specifications are subject to change without notice.

EXPORT & GOVT., EDUCATIONAL ORDERS WELCOME



You are now the proud owner of THE BIG ALTERNATIVE SCROLLER, the amazingly powerful video captioning package with text scrolling facilities.

COMPETITION

Amiga Computing and Alternative Image do it yet again with another amazing software giveaway, including Real3D and Alternative's very own Big Alternative Scroller

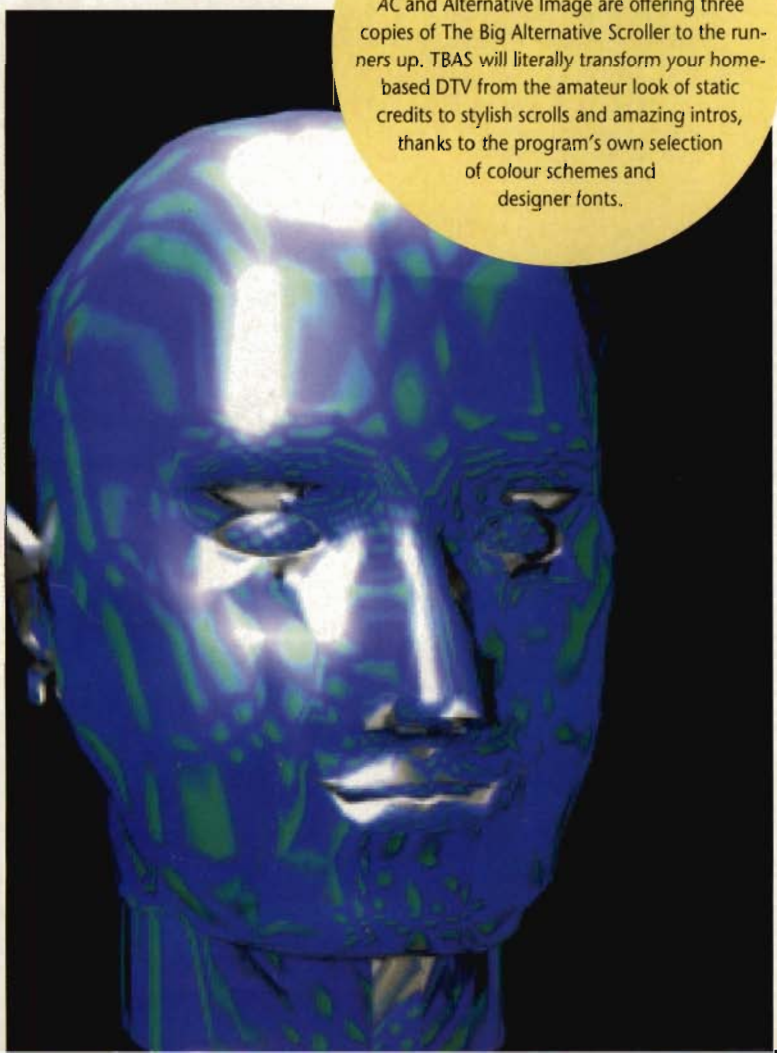
Every day we're bombarded with state-of-the-art imagery thanks to TV with its array of computer-generated images. Now, thanks to this amazing giveaway, we're giving you the chance to emulate or even better the efforts of the pros.

AC in conjunction with Alternative Image is offering three copies of Real3D – one of the premier ray tracing packages on the Amiga.

Two of our copies work with a standard unaccelerated Amiga. The third is designed for the power players who work on machines equipped with accelerators boasting maths co-processors.

That's not all, folks!

As well as the amazing Real3D giveaway, *AC* and Alternative Image are offering three copies of The Big Alternative Scroller to the runners up. TBAS will literally transform your home-based DTV from the amateur look of static credits to stylish scrolls and amazing intros, thanks to the program's own selection of colour schemes and designer fonts.



ENTRY FORM

Please tick the box appropriate to your particular machine:

Standard Amiga ☐
Accelerated Amiga ☐

Questions

1. Will reflective objects within a rendered or scanline image reflect:

The entire world around them including other objects ☐
Just the sky and the ground ☐
Only the lights ☐

2. What type of ray tracing package is Real 3D?

A solid modeller ☐
An organic modeller ☐
An Airfix modeller ☐

3. Is Henri Bujko:

The creator of Real3D ☐
A maniacal disciple of chaos ☐
One of the founding fathers of Alternative Image ☐
All three... ☐

Send your entry to: The Alternative Image Competition, *Amiga Computing*, Europa House, Adlington Park, Macclesfield SK10 4NP

Don't forget to supply your name and address, plus a daytime phone number if available.

Please tick this box if you do not wish to receive promotional material from other companies ☐

17 Bit Software

Quality Public domain

Please note, the * means disks are not PLUS compatible, a lot of PD does work on a Plus but please take care to make sure it does before ordering. We stock all major PD so just give us a call if you do not see it listed.

DISK PRICES

Single Disks £1.10
Buy 10 Get 1 Free
Buy 25 Get a Commercial Software Title Free (not Pocket Power)

Deja-Vu £3.50
Scheme 17 £1.75

All 17-Bit, Fish, T-Bag are £1.10

Please add 50p to all orders for post and packing. Thankyou.

ORDERING DISKS

All major Credit Cards are taken.
Opening Times are:
Mon - Thurs 9am - 8pm
Fri - Sat 9am - 5.30pm
Please make Cheques and Postal Orders payable to:
17 BIT SOFTWARE
Our address is
1st Floor Offices, 2/8 Market St.
Wakefield WF1 1DH (Dept AC)
Telephone: (0924) 366982
Now 2 lines.
We welcome foreign orders (Add 20%)

THAT BIT BETTER THAN THE REST

17 BIT SOFTWARE *Est.* 1988

LATEST ADDITIONS

1879 Gelegnite Fonts (amazing fonts disk)
1878 Total War (Mega game)
1877 Simon Space Maths (educational)
1876 ABCD - LSD Music on four disks
1875 Boot X 4.47 the latest version
1874 Teckno music by Cubik (score city)
1873 Powerbench 1.0 (good WB disk)
1872 Pogo (brill arcade game)
1871 Axix Unknown territory demo
1870 Ball Lightning (game)
1869 Down Hill challenge (game)
1868 Tetrix (the best ever version of Tetris)
1867 Sid 2
1866 A+B Star Trek Slideshow (2 disks)
1865 Wiggle dis music disk
1864 Dynamite fonts 1
1863 Rave tracks (hardcore music disks)
1862 Bug Blaster (very good game)
1861 Jack mix 2 (remix)
1860 Cybordine Anim (1 meg)
1859 Altern 8, Evaporate remix
1858 Boot block compilation disk
1857 Icons galore WB2 only (By g Henderson)
1856 WB2 Utilities (gary Henderson)
1855 Font Farm
1854 A+B Erasure (Breath of life) 2 disks
1853 ABC as above but different mix (3 disks)
1852 Army of lovers (Bite the bullet)
1851 *Tubular Bells
1850 Rummy (Card game)
1849 Plus Issue 8 (+ owners utils and games)
1848 Radbench for + owners (Ram Res WB)
1847 Spellcheck 1.3 (excellent spell checker)
1846 China Shop (Game)
1845 Lemmingoids (great game)
1844 * Frustration (brilliant text adventure)
1843 Plus Issue 7 (more stuff foe + owners)
1842 Plus Issue 6 (great utils and games)
1841 Bach concertos 5+6
1840 Bach concertos 3+4
1839 Bach concertos 1+2
1838 Virus Killers (lots of em)
1837 * Super Invaders (game)
1836 Jackie chan slideshow
1835 Perm Checker 1.2 (Pools predictor)
1834 Wormhole (game)
1833 Growth (game)
1832 Fortran Compiler
1831 Intro's Compilation
1830 Rainbow slideshow (Hello Bungle)
1829 Animated Pointers
1828 Forms really unlimited
1827 ABCD Manic Raves 2 on four disks
1826 A+B Kefrens Megamix 1 (good music disk)
1825 Bass subliminal vision
1824 Walt Disney clipart
1823 Simpsons shoot-em-up
1822 Electro cad 1.4 (Design your own chips)
1821 Serene 3 (shoot-em-up)
1820 Serene 2 (shoot-em-up)
1819 Serene 1 (shoot-em-up)
1818 Astronomy Slideshow
1817 HD click v2.0 (hard drive menu)
1816 Bouncer remix (yer not comin in)
1815 Rave generator music disk
1814 Mike Archers Basso Music (brill)
1813 200 Utils on one disk (megatastic)
1812 A+B Blues Brothers remix (2 disks)
1811 Ed keys (keymap editor)
1810 ANATT (good text adventure)
1809 Alchemy mega demo
1808 Plus Issue 5 (more mega utils for the +)

STOP PRESS STASH!!!

1909 Freepaint, Great Art Package
1908 Challenger, Super Quiz
1907 Copper, Mega Arkanoid Clone
1906 PCQ Pascal, New Version
1905 History of Amy Squirrel
1904 Digital, Magnetic Dreams
1903 Battlements, Hunchback
1902 Fireland Demo, Stunning
1901 Purity Test, Test yourself
1898 Digital, The Trash Demo
1999 A+B Drums + Reverb, Music

AMAZING SOFTWARE BARGAINS

Steve Davis World Snooker
Still considered by some as the best Snooker game on the Amiga **Only £7.99**

Feudal Lords
RPG At It's very best RRP £26.99
Our price £7.99, *Beat that for value.*

Battle Squadron (Follow up to Hybris)
This mega blast is one of the very best Shoot-Em-Up's around **Only £7.99**

Please hurry stocks won't last long!!

Titles change all the time, so please give us a call before you order! Buy all three and get a superb PD Starter Pack Free!!!!

ANIMATION SPECIAL (1 MEG OR MORE)

255 Walker 1, 262 Walker 2, 464 Space Sphere (my fave), 240 Anglepoise lamp, 583 Busy Bee, 684 Fractal flight, 802 Magician 2, 807 Flight Anim, 808 Stealthy (Schwartz), 762 Stealth 2, 809 Biplane, 852 Ghost Busters, 861 A+B Light cycles, 902 Robocop, 903 Peg Anim, 904 Raiders Of The Lost Ark, 906 Bust Anim, 910 Basketball, 909 Porky Pig, 911 Applecus, 912 Batman, 975 Juggler 2 (2 meg), 976 At The Movies (2 meg), 998 Asteroid Field, 999 Trackball Anim, 1022* Amy v Walker, 1032 Juggette 2, 1091 Mr Potato Head, 1092 Mars Flight, 1093 The Boings, 1094 Coyotte 2, 1095 Radio Anims, 1096 Conga Anims, 1122 Miss Mamsell (2 meg), 1144 Helicoptor, 1190 Pinball, 1191 Tea Cup, 1208+1209 Anti Lemmin (2 meg), 1246+1247 Rodent Anim, 1253+1254 Dating Game (2 meg), 1312 Potato Head 2, 1337 Shuttlecock, 1403 Madonna, 1411 Cruise for a Corpse, 1519 Bruce Lee, 1533 Vietnam Conflict, 1535 ATF Agility, 1675 Rocking Robot, 1676 James Whale Anim, 1677 Canyon Flight, 1736 Easter Island, 1636 ABCD The Landing (4 meg), 1637 ABC Buzzed (3 meg), 1653A+B Circus Act, 1534 Vtol Anim, 1592 ABCD At the Movies 2 (1 or 3 meg 4 disks)

All of the above are great to show off your machines capabilities. Please note price is per disk not per title (ABCD = £4.40). Thank You

14 Disk Clipart Pack
Only £14.00
It would be easier to list what picture isn't here. Probably the only Clipart pack you will ever need!

NEW SCHEME 17 £1.75
SS14 - Crystal Symphonies 2, Music Disk
SS15 - Kids Karaoke
SS16 - Freak Scene (Rave disk)
Fish up to 629 as well!

LATEST ADDITIONS

1807 *Intro's compilation
1806 Electronic Knights
1805 *Hawk earths sorrows (demo)
1804 Slideshow generator (superb)
1803 Tanks (very good game)
1802 Music mania (startrecker, soundtracker)
1801 *Garloween the movie
1800 *Disk 1 of above
1799 + 1798 Scream 2 disk mega demo
1796 A+B A64 emulator v2.0
1795 Image Utils (Genloc stuff etc)
1794 Amos Update 1.32
1793 Transformer v3.3 (very popular)
1792 Opti comms 2 (the very best comms disk)
1791 Arsenal slideshow (come on you reds)
1790 Disk menu v1.0
1789 Dead beat vol. 1
1788 Contact
1784 Software failure demo
1782 A+ Swimwear models (very nice)
1781 Cat demo (very nice demo)
1780 Kefrens mega mix 2
1779 Brian Badland comic artwork
1777 Viking Saga (animation)
1775 Edword (Text editor)
1774 LSD adventure cheats
1773 *Angels mega demo
1772 A+B trekkies mag on 2 disks
1771 Samples volume 1
1770 Icon nightmare (over 50 icons)
1769 Classic Utilities
1768 Plus Issue 4 (+ owners disk)
1767 Fractal Generator (very fast)
1766 *Tornado slideshow (top ho Charlie)
1765 Game tamer 2.3 by g Henderson
1764 Skoda challenge (race game)
1763 TV Graphics (Genloc stuff etc)
1761 Video Applications
1760 Video Applications
1750 Protraker v2.0 (with docs)
1749 Microbes (superb game)
1747 *Demolition Mission (good game)

FISH EXTRAVAGANZA

F601	Apipe	F512	Reversi
F602	Plt Lib	F513	DKB trace
F603	Dynacad	F514	Gear Calc
F604	Midi Stuff	F515	Cheque book
F606	Auto Graph	F516	Loom emulator
F607	Dos Control	F519	Text Sort
F617	Revenge (game)	F521	Landscape
F618	Voice CLI	F522	Mandelbrot
F619	Amigazer	F526	Data easy
F620	Track Dos	F527	Zoo
F621	Icon Editor	F530	Turbo Title
F622	U-edit	F531	Filesearch
F623	Make Icon	F532	Boot pic
F625	Sys-Info 2.62	F533	Boot gen
F626	Bowling League	F535	Biz Calc
F627	Free Paint	F536	Chemesthetics
F628	Adventure	F537	Bootgames
F629	Boulderdash	F539	Disk drive test
F501	Admenu	F541	Mine clear
F502	Strategy game	F542	Powersnap
F503	PCQ pascal	F544	Lander
F506	Star Trek Triv	F548	Label Maker
F506	MultiPlayer	F551	Tool manager
F511	Connect 4	F582	Diplomacy

We are one of the few libraries who take Switch

Once more Darren Evans guides you through the PD Universe, so in the words of a balding starship Captain, "let's see what's out there!"



PUBLIC SECTOR

Basic Tutor

Ground Zero PD • Disk No UI52

Basic is by far the most commonly used programming language around and AmigaBasic will probably be the first programming language that a newcomer will have experience of, being included in the package when you buy the machine.

This PD package sets out to provide absolute beginners (good title for a film there, eh?) with a tutorial on the concepts of Basic.

The structure of the tutorial consists of descriptive text with occasional short pieces of code, along with a quiz section to fortify what you have just learned.

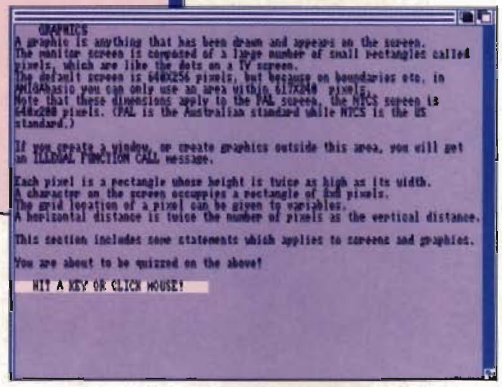
It does not attempt to be as comprehensive as some of the books available on the subject, but it is still a good way to get to grips with the intricacies of programming.

Topics covered include graphics, files, the keyboard and many other aspects of Basic.

If you are interested in Basic programming then this disk is for you.



The main menu showing the various topics covered in the tutorial



An example of the information given throughout the tutorial. Here, it provides information on graphics

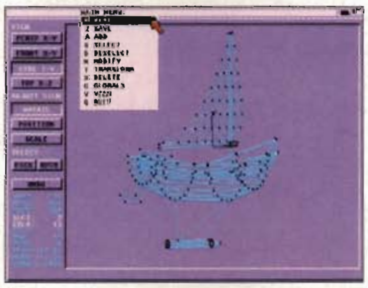
Fastlife and Vertex

Fish Disk No 608

This disk has a couple of good programs on it. Fast life is a speedy version of the good old Life program. It has a good intuition interface which makes it easier to use than other variations of the program.

Some of Fast Life's features include four screen sizes, 35 generations per second (Amiga 3000/25) or 19 generations per second (Amiga 2000/500/1000) and 153 patterns in text file format.

Vertex is a pretty good 3D object modeller. It allows the choice of any view, including perspective, when selecting points or examining objects. The view can be rotated, positioned and scaled at will either by typing in values or using the mouse.



The main display showing a wire frame representation of a boat. Would you sail in this?

Colour It 1.3

Star Tronics • Disk No 58

I spent a whole half hour messing around with this disk. It brought back memories of being left alone with a mountain of multi-coloured crayons and a massive colouring book (well it seemed massive, or was it just that I was small?).

"Sit there like a good boy and draw a nice picture for mummy," my mum would say.

After about an hour's peace, she would return only to spend the next three hours cleaning the furniture and wallpaper, not to mention frantic research into the toxicity of crayons and their effects on kids with a tendency to eat anything placed in the right hand.

Colour It is a electronic version of the ➤

Animation Tool Box

Ground Zero PD • Disk No UI39

This disk contains many useful tools in the production of animations. Those of you who like to delve into animation production may find some of the tools useful. Some of the programs included are:

- Andrew's Animation Studio – another simple animation creator. Not the most powerful of programs but is good for "messing around" with animation.



One frame from the example animation file with Direct Action. Here, good old Tut is about to become irritated by a fly

- Direct Action – used for creating animations using simple cell animation techniques. It uses frame-by-frame editing and also has some sound capabilities.

  Because only the position of shapes are saved, you can have animations of up to 25 minutes.

- Animation Bridge – here is a standard for animation files referred to as ANIM-5 or ANIM opt 5. However, lots of animation readers and editor/special effects packages sometimes have problems with variations on the format.

  An example is when some readers allow changing the colour map "on the fly", while the animation is playing. Other readers will either abort or completely crash if they find more than one colour map in a single animation file.

  Animation Bridge is useful if you want to use a special feature on another animation package which is not available on the one you are using.

  It allows changes to and from the following formats – Deluxe Paint III, Animagic, The Director, Movie 2.0, Animation: Editor and Animation Studio.

- ATI-Anim to IFF Converter – this program allows the conversion of an animation file back into its component IFF files. However, it does not seem to work very well with HAM animations.

- Makeanim – this is a standard ANIM compressor.



Here you see the various blocks that make up the animation of the fly and Tut's facial expression

- Showanim v5.30 – this lets you play ANIM and IFF ILBM animations. Many options allow the running of animations from the actual animation files default tool and input of options into the tool type simply by using the Workbench pull down menu's Info command.

- Vid3DFix v2.0 – allows the processing of Aegis Videoscape 3D v2.0 animation files so they fully conform to the published specification for IFF animation files.

paper variety, therefore a lot safer for the furniture. The program uses IFF format pictures, which you can draw yourself with any art package which supports IFF. They're presented on-screen ready to colour in using up to 32 colours.

Clicking the right mouse button brings up the colour palette, while clicking the left button fills the area on-screen, where the mouse is positioned, with the selected colour.

There are some pictures already included on disk, and when the colouring is complete your effort can be saved to the Album directory ready for viewing with the My Album program.

Home Business Pack v1.0

Star Tronics

They say that money isn't everything and they're right, but I would like to add that although it isn't everything, it's not far off. So wouldn't it be a good idea to efficiently keep track of how much you spend?

Enter the Home Business Pack. With this suite of seven programs you can keep tabs on how much damage you and your bills do to your bank account.

It allows the entry of transactions into the cheque book journal as they occur. It presents you with the remaining balance after each transaction is entered, and you can customise the expense code table to suit your particular situation, specifying budget amounts for each category.

There is the option to produce detailed and summary reports as well as the ability to search the cheque book journal using any desired search criteria.



Expenses display showing expense codes and amounts



The little spherical hero of Ball Lightning. "Who am I? What do I do now?" Don't ask me matey, I don't know either

Ball Lightning

Seventeen Bit Software

This is a strange game. You apparently control the direction and fate of a rather spherical chap (herein referred to as Bob), around a multitude of different screens.

I think everything takes place within some sort of house – the light fittings and fireplaces are a dead giveaway I suppose – and you must control the bouncing character through the rooms.

There are hazards along the way such as electrical sparks and other odd airborne objects that aren't beneficial to Bob's health whatsoever, so your duty is to make sure he avoids them.

Along the way, you pick up various items which I assume will come in useful, but I'm not quite sure!

By now, you are probably thinking that I don't quite know what the hell is going on or what the game is all about and you would be absolutely right, I don't.

Such ignorance is brought about by the fact that the game disk contains no doc files explaining just who Bob is, what Bob is meant to be doing in this strange house and why he should do it in the first place.

Having said that, I still found myself taking the odd moment out to load it up and have just one more go, probably with a subconscious attempt to fathom it out once and for all.

Maybe that's the whole idea behind the game. Tell the player nothing and watch while his/her curiosity overcomes him/her.



Get organised with Database Wizard



A true masterpiece and I'm not taking the Mickey (what a sad attempt at humour – Ed)

What's going on in the PD world?

Do you have any news about anything relating to the world of PD? Maybe Prince Charles has opened his own PD library or your library has just topped one million individual titles. If so, drop me a line.

Catalogue Workshop Disk

Star Tronics

There comes a time in ones' life when you just have to get organised. So why not let the computer do the tedious work for you?

This disk consists of a collection of various cataloguing and organising programs. Video Librarian, for example, is a database for organising your collection of home videos and films.

It allows you to view or print information sorted by title, star, subject or a combination of criteria. It has good search facilities for locating specific text and displays any records which contain that text.

It also allows the printing of labels for the videotape showing tape number and title. If your video collection resembles a precarious mountain of plastic with ad-hoc ordering, then maybe you should consider getting this disk.

When submitting disks...

For all those PD libraries who already supply their wares for Public Sector, and for those who are intending to, please include a contents list explaining what is on the disks along with the corresponding disk number.

Some PD libraries are adopting the good habit of including a contents doc file on the disk with a brief overview of the programs on it.

I tend to decide beforehand what type of PD programs to cover in following articles and it would save time if I could just scan the included list in search of those types.

Those disks which do not include lists tend to be put to one side in favour of those with lists, while I find time to load them, search through the doc files to see what the program is for and then decide whether to include it in this month's issue or following ones.

Ensure that your disks are labelled with the disk number.

If any significant changes to your catalogue disk occur, please send the updated catalogue disk to me.



BATTLEAXE P.D.

SPECIALISTS IN AMIGA PUBLIC DOMAIN AND SHAREWARE

ALL FISH
ALL DEJA VU
T-BAG

ALL ORDERS DISPATCHED 1st CLASS, SAME DAY ON QUALITY GUARANTEED DISKS

!! A500 PLUS OWNERS !!

We make sure that all disks in our adverts are fully A500 plus Compatible. So there is no need for you to contact us by telephone to check. All disks work on all other Amiga's as well unless stated otherwise.

MUSIC PACK +

MED V3.2
THE GREATEST MUSIC MAKER
+ 4 DISKS
FULL OF INSTRUMENTS, BEATS etc . . .
TO GET YOUR REMIXES GOING!!
£6

CATALOGUE +

INFO ON ALL OUR DISKS
FREE SOFTWARE ON THIS DISK
CHANCE TO WIN MIDI & KEYBOARD
AND 2 x 0.5 MEG UPGRADES
£1
FREE WITH ORDERS OVER 10 DISKS

DEJA VU

PROFESSIONAL SOFTWARE
£3.50 PER TITLE. AUTHOR GETS ROYALTIES

- +LPD22 **LC10 FONTS**: New fonts for your Star LC10/LC200 printer.
- +LPD31 **CLI PRINTER DUMP**: Prints a screen dump of the screen display.
- +LPD34 **INVOICE PRINTER:** Quick production of invoices on your paper.
- +LPD35 **T-TECHDRAW**: Technical drawing program with print facilities.
- +LPD36 **FRACGEN II**: Great fractal program generator.
- +LPD44 **FORMULA 1 CHALLENGE**: A great racing car game.
- +LPD47 **DIRTY CASH V1.06**: The best fruit machine wim on the Amiga.
- +LPD52 **LC24 FONTS DISK**: New fonts for you to download to most 24-pin printers. Very good.
- +LPD65 **POWER PLANNER**: Personal organiser, keep track of things.
- +LPD66 **HOTEL MANAGER**: A great board game, quite similar to that old classic Monopoly (1Mb)
- +LPD71 **BATTLECARS**: Racing game - commercial quality - highly recommended (1Mb)
- +LPD75 **VIDEO LAB**: Simple to use video titling package for home video's. Great quality.
- +LPD77 **POWERBASE 2.1**: Powerful database with a host of features.
- +LPD79 **MUSIC ENGINE**: Plays music created in MED, Soundtracker etc. NEEDS AMOS (1Mb)
- +LPD81 **POOLS PRO**: Program to help you fill in your pools coupons.
- +LPD86 **NCOMMAND V2.03**: Adds workbench 2.0 like displays to AMOS programs - very impressive. (1Mb) NEEDS AMOS.

GAMES

- +904 DRIP ....(FAMOUS)
- +908 STARTRECK ....(2 DISKS)
- +909 TANX ....(ADDICTIVE)
- +910 CHESS
- +915 MISSILE COMMAND
- +916 AMEOBA INVADERS
- +917 ROLLERPEDE, INVADERS
- +918 AMIGA DRAGON TILES V2.5 ....Great tiles game
- +919 ZEUS
- +920 HOLLYWOOD TRIVIA
- +922 THE SIMPSONS
- 925 WIZZY'S QUEST
- +926 THINK TWICE ....Master Mind
- +927 HYPER-BALL..............Arkanoid clone
- +929 SEALANCE ..Submarine Sim, Good
- +930 SHAPES ....Good for Kidz
- +931 WACKO Jr In Wonderland
- +934 SCRABBLE
- +935 WORMHOLE
- +936 ANAGRAMS
- +938 POM POM GUNNER
- +939 SKY FLYER
- +940 GALACTIC FOOD FIGHT
- +941 ATIC ATAC
- +942 D-TRIS (TETRIS)
- +943 ARCADE CLASSICS inc space invaders
- +944 NU THE SHOOT EM UP Great stuff
- +945 CARD GAMES lots
- +947 E-TYPE The best Asteroids clone, NEW

+856	PRINTER DRIVERS	CAN'T GET THAT DARN PRINTER TO WORK??? HELP!
812	WINDOWSBENCH	2 disks YOU'VE HEARD OF WINDOWS ON THE P.C. NOW ON AMIGA
+797	TYPING TUTOR	MEASURES TYPING SPEED AND ADJUSTS LEVEL OF DIFFICULTY
+799	CLERK	FANTASTIC ACCOUNTS PROGRAM FOR BUSINESS OR HOME
+839	DESKTOP PUBLISHER	MAKE LEAFLETS etc WITH GRAPHICS + TEXT GOOD
+857	SUPERKILLERS	KILLS SADAM PLUS 171 MORE VIRUS'S LATEST
+840	TEXT PLUS V3.0C	WORD-PRO MENU DRIVEN AREXX SUPPORT THE BEST
+808	P.C. EMULATOR	RUN P.C. SOFTWARE IT WORKS COME WITH C.G.A. GFX NEEDS MS-DOS
+810	PASCAL COMPILER	IF YOU ARE UP THERE WITH THE BIG BOYS GET THIS
+710	AMIBASE	POWERFUL EASY TO USE DATABASE WITH 4 MATHEMATICAL FUNCTIONS
+858	JR-COMM 1.02	THE LATEST VERSION OF THIS COMMS PROGRAM GOOD
+784	C.MANUAL V2	4 DISKS ALL YOU NEED TO LEARN 'C' CONFIDENTLY
+704	NORTH 'C'	UNPACK ONTO 2 DISKS COMPLETE 'C' ENVIRONMENT
+686	T.V. GRAPHICS	2 DISK BACKGROUND & FONTS FOR VIDEO ENTHUSIASTS ETC
+684	VIDEO APPLICATIONS	2 DISK VIDEO UTILITIES TO ACCOMPANY TV GRAPHS
+731	SMOVIE	AMAZING TITLE AND TEXT SCROLLER FOR VIDEO ETC
+859	SOMETHING FOR NOTHING	2 DISKS VIDEO UTILITIES + FONTS SERIOUS
+860	N-COMM.V1.92	THE LATEST VERSION OF THIS GREAT COMMS PROGRAM
+676	SID V1.06	THE LATEST!! CLI IS A BLAST WITH THIS ONE
+688	DISK SALV	MUCH MUCH BETTER THAN DISKDOCTOR ON W.B
+681	BATTLEAXE ICON STUDIO	THE TOP ICON MAKERS AND EDITOR WITH SOME ICONS
+682	PRINTER DRIVER GENERATOR	YOU WANT A PRINTER YOU NEED A DRIVER
+683	D.K.B. TRACE	EXCELLENT RAY TRACE PROGRAM
+711	LEARN & PLAY	2 DISKS, GOOD YOUNGER TUTOR
+700	CLIP ART A,B,C,D,E	5 DISKS BEST IFF PICS FOR DTP ETC
+650	QUICKBASE, LABELPRINT, VIDEO-LIBRARY, MENU	1 DISK GOOD VALUE
+703	GRAPHIC UTILITIES	TOTALLY PACKED WITH GRAPHIC STUFF
+781/2	DYNAMITE FONTS 1 & 2	2 DISKS FULL OF FONTS TO USE IN DPAINT ETC
+761	MEGA UTILS	50+ YES OVER 50 USEFUL UTILITIES
+725	ANTIFLICKER	STOPS SCREEN FLICKER IN INTERLACE MODE
+787	HARD DRIVE UTILS	INCLUDES MR. BACKUP AMONG OTHERS IS GOOD
+885	AUDIO MAGIC V1	FULL OF USEFUL MUSIC SEQUENCERS & SOUND RIPPERS
+886	AUDIO MAGIC V2	IF YOU HAVE THE ABOVE, YOU'RE BOUND TO WANT THIS
+887	PROGRAMMING 1	FULL OF USEFUL HINTS TIPS ETC FOR ALL LANGUAGES
+888	DEVPAC SOURCE CODES	LOTS OF PROGRAMS FOR YOU TO EXPERIMENT WITH
+889	SPECTRA PAINT	A FULL WORKING PAINT PACKAGE, IFF, USE BRUSHES AND MORE
+890	GELIGNITE FONTS	MORE GREAT LOOKING FONTS TO USE IN YOUR PAINT PACKAGE ETC
+891	MIDI UTILITIES	A GROUP OF UTILITIES TO USE IN CONJUNCTION WITH A MIDI/KEYBOARD
+892	MESSY SID II	AN UPDATE TO THIS GREAT FILE CONVERTER, AMIGA <> PC
+804	ASSASSINS PRINTER UTILS	MANY PRINTER UTILITIES, LABEL PRINTERS etc
+844	LITTLE BENCH 2.0	A GREAT WB REPLACEMENT, WITH LOTS OF USEFUL UTILITIES
+845	ANTI-VIRUS V42.0	!NEW! GREAT PLUS COMPATIBLE VIRUS KILLER
+846	MAGNETIC PAGES	MAKE YOUR OWN MAGAZINE ON DISK, OR TUTORIAL etc
+1001	MED V3.2	THE VERY LATEST AND BEST MUSIC PROGRAM
+1002	ESSENTIAL UTILS III	A GREAT COLLECTION OF UTILITIES
+1003	ASSASSINS MEGABOOT	MASSIVE COLLECTION OF BOOT-MAKERS
+1004	MR BACKUP V5.02A	BACKS UP YOUR HARD DISK IN MINUTES
+1005	FREE COPY V1.4	REMOVES THE PROTECTION FROM GAMES
+1006	AMIGA PLUS UTILITIES	SPECIALLY FOR THE A500 PLUS
+1025	LABELBASE V3.00	STORE NAMES & ADDRESSES, AND PRINT ADDRESS LABELS
+1026	NCOMM 1.921	BEST COMMS PROG + HOST OF ARCHIVING FILES etc
+1027	DCOPY V2.0	GREAT D-MOB COPIER, FORMAT, NIBBLE COPY, DOS COPY+ & MORE
+1029	HYPER CAT V1.2	STORE 9999 DISKS/PROGS. BY NAME OR DISK NO.
+1032	GENERATES GREAT MAPS	INCLDUDING NATIONAL BOUNDRIES. SAVE AS IFF etc
+1038	PIC BASE	...SPECIAL DATABASE FOR STORING IFF PICS, VIEW THEM etc. KEEP TRACK OF YOUR ART

UGA's AMIGA INTRODUCTION PACKAGE +

Ideal for beginners, and very useful for others. Get everything that a newcommer to the AMIGA needs in one package. Copiers, Crunchers, Text Editors and lots more to get you off to a great START.
£5

NEW AMIGA FANTASY PUBLIC DOMAIN £1.50 PER DISK

+ ULTIMATE AMIGA VIRUS PROTECTION DISK +
As it says the ultimate virus protection disk has got to be the best virus killing collection to date. Has so many virus killers, it's unbelievable.

+ POWER SAMPLES 1&2 (£1.50 each) +
A great collection of sampled sounds for you to add to your music creations. Can be used with MED and all others. Very good quality.

D-PAINT TUTORIAL +
By a German artist, a great tutorial showing you how to produce great logo's and fonts using Deluxe Paint III, or IV. Great value. You'll be an artist in no time!!

BUSINESS PACK +

WORDPROCESSOR
SPELL CHECKERS
DATABASE
SPREADSHEETS
ACCOUNTS & MORE
£6

EDUCATION PACK +

ABSOLUTELY FULL OF GREAT TUTOR PROGRAMS, INCLUDES: FRENCH, GERMAN, SPANISH, GEOGRAPHY, MATHS & MUCH, MUCH MORE.
LET YOUR AMIGA BE YOUR TEACHER
£6

AM/FM +

AM/FM is a recently started disk mag for Amiga users who are musically interested. It covers all aspects of using the Amiga for sound and music production, bringing News, Reviews, Gossip, Tutorials as well as 3-4 selected Amiga only songs, 3-4 Midi songs and 2-5 selected Sound/Music utilities in each issue. Created by some 20 professional musicians including Bjorn Lynne and Teijo Kinnuenen . . .
£2.50
So good most people re order all 3 back issues

+ GAMES PACK +

The best have been put together. Over 20 great PD games all picked to be the best at the current time. All Plus compatible
£6

+ DESKTOP VIDEO PACKAGE +

This pack has been made due to the great demand for this type of material. It consists of: Smovie the text scroller, 2 disks full of backgrounds & fonts, & 2 disks full of Video Application utility software. To be used with Genlock etc.
£6

NEWSFLASH +

2 disks with an optional 3rd disk crammed with all the latest info on all subjects. This has got to be the best Amiga disk based Mag. Every issue full of Utilities/demos/pic/music and a great deal of reviews and articles. 1 issue £4.99 or £6.99 with additional music disk.

+ indicates also A500 Plus Compatible

DISKS £1.25 EACH
DEJA VU £3.50 EACH
NEWSFLASH £4.99 issue

POSTAGE
ALL ORDERS
50p SAME DAY DISPATCH UK
£1.50 EUROPE £3 REST OF THE WORLD

CHEQUES & P.O's TO: BATTLEAXE P.D. (AMC)
125 KINGSWOOD, THORPE MARRIOTT
NORWICH NR8 6UW, NORFOLK
TEL: 0603 261060

STRiCTLY pd

NOW ALSO AVAILABLE FROM HARGWARE IN AUSTRALIA

Dept AC, 11 YORK PLACE, NR BRANDON HILL, HOTWELLS, BRISTOL BS1 5UT

Keeping Public Domain at Strictly Public Domain Prices

Creative Utilities

U241 FONTS/LOGOS – Masses for use with D-Paint.
U237 PROFESSIONAL DEMO MAKER – Create your own demo masterpieces.
U299 SLIDESHOW MAKER – Shows how to present slideshows in different ways.
U084 SPEECH TOY – Get your Amiga talking.
U082 VOICES – Add speech to your demos etc.
U312 MANDLEBROTS – The best Mandlebrot generator around.
U315 ULTIMATE ICONS – Includes Icon Lab, Icon Master & Icon Meister – splendid disk.
U321 SUPA FONTS – Masses of them for use with D-Paint etc.
U079 ELECTROCAD – Impressive package.
U078 MCAD – Great 3D Design Package.
U331 LAND BUILD 3.2 – Generate landscapes and view from any angle. Amazing!
U346 ULTRAPAINT – Fab paint package.
U364 SCREEN MOD – Customise the way programs and screens appear.
U366 SHADOW DEMO MAKER – 3 Brilliant demo making utilities
U500 DEMO CREATOR PACK (6 DISKS) – Get the most out of your Amiga - Get creative.
U491 DKB TRACE – Excellent Ray Trace prog.

Creative Music Utilities

U297 SOUND WORKSHOP – Essential utils for use with Soundtracker type progs.
U281 MED V3.2 – Latest and best PD music maker.
U286 HOUSE SAMPLES (2 DISKS) – All you ravers get these now - Sound!
U319 SOUND TRACKER SAMPLES (4 DISKS) – Crammed with over 300 samples!
U339 FILM SAMPLES – Chunks from your fave films.
U341 SAMPLE MAKER V1.0 – Create your own samples - excellent.
U499 SOUND & NOISE TRACKERS – Crammed with different progs.
U497 AUDIO MAGIC V1 – Full of useful music sequencers + sound rippers.
U498 AUDIO MAGIC V2 – More great music utilities.
M012 GAMES MUSIC CREATOR – Create tunes to go with games.
U495 PROTRACKER – Another great music creating package.

Business Utilities

U054 BUSINESS CARD MAKER – Very useful utility.
U089 FLEXIBASE – Very versatile database.
U006 BUSINESS PACK (3 DISKS) – W/Processor, Spreadsheet + Database.
U094 UEDIT – Best text editor in P.D.
U317 HOME BUSINESS PACK 2 – Keep your bank accounts in order.
U326 AMIGAFOX – The first DTP package to merge in P.D.
U347 AMICASH – Get your accounts ready for the tax man.
U355 600 BUSINESS LETTERS – Can be loaded into text editors & word processors.
U496 TEXT PLUS 3 – The latest and probably best wordprocessor in P.D.
U494 CLERK – Fantastic accounts program.
U041 AMIBASE – Powerful and easy to use database with maths functions.
U493 QUICKBASE – Label print, Video library menu
U490 DISKTOP PUBLISHER – Make leaflets etc., with graphics and text. Good.

Useful Utilities

U492 D-PAINT TUTORIAL – Get the most of D-Paint 3&4.
U490 TYPING TUTOR – Measures typing speed and adjusts difficulty.
U058 NORTH C – Find out about C compiling.
U313 AQUARIUM – Find out wats on fish disks 1-470
U318 SYSTEM TEST DISK – Find out whats wrong with your Amiga.
U322 SUPER KILLERS – Totally iradicate those viruses - mega disk!
U324 HARD DISK UTILS – Useful utils with full docs for Hard drives
U328 SOZOBAN 'C' COMPILER – The most comprehensive disk on 'C' yet.
U329 TURBO IMPLODER V4.0 – Very powerful cruncher.
U336 PRINTER DRIVER PACK – Caters for around 150 printers.
U337 QUICKBENCH PLUS – Speed things up on your A500 plus.
U340 POOLS CHECKER – Find out if you've won a fortune.
U343 CHESS TUTOR – Become the next Karpov
U344 I.Q. TESTER – See if you're as thick as everyone thinks.
U345 ASSASSINS LABEL PRINTER – Smarten up your disk library.
U357 SID V.2 – Makes all file operations quick and simple.
U358 SUPER C – Masses of CLI utilities - Excellent.
U360 WINDOW BENCH – Not just a pretty workbench but useful Utils incorporated.
U362 ARTM – View inner workings of Amigas excellent system.

Blank Disks

12 in own plastic storage box £7.50
50 ....£22.50
100 ....£40.00
These prices include P&P

clip Art

CA1 Animals plus collection information
CA2 Animals, Architecture, People, Art 1
CA3 Art 2 (fonts)
CA4 Arrows, Art Deco, Logos, Stars, Explosions
CA5 Education, Financial, Art Misc., Symbols
CA6 Food and Drink
CA7 Environment, Food & Drink, Health & Home
CA8 Valentines, Weddings and Leisure
CA9 Birthdays, Xmas, New Year, Easter
CA10 People (Children, family, fashion, romance)
CA11 People (Men & women)
CA12 Signs (Bears, Xmas and misc.)
CA13 Sports (American Football to Water Polo)
CA14 Works and Trades 1, Transport
CA15 Works and Trades 2

Slideshows

75p

D462 Invisible World
D329 Bo-Derek
D416 Gorgeous Models
D442 Gulf War
D129 Maria Whitaker
D130 Sam Fox
D313 Paradise Picture Show
D435 Rambo Slides
D170 Girls on Sport
D444 Terminator II
D269 Simpsons
D303 Saucy Postcards
D470 Kathy Lloyd Slideshow

(Dept AC) 11 YORK PLACE, NR BRANDON HILL, HOTWELLS, BRISTOL BS1 5UT

☞ Cheques/P.O's payable to STRICTLY PD
☞ Buy 30 or more disks for just 75p each
☞ Over 21 disks ONLY 85p EACH
☞ Take the 11+... only **99p** per disk when you order 11 or more!
☞ Orders of 10 or less pay £1.25 per disk
☞ Please add £1 to all UK orders for first class postage. Orders from Europe please add 25p per disk and Rest of World add 50p per disk for extra postage costs.
☞ Catalogue disk available only £1
Reviews of well over 1000 disks + loads more

The complete Strictly P.D. library is now available in Australia. To order a catalogue please send a cheque or postal order for $2.00 to Hargware, Dept AC, 29 Woralu St, Woramanga, ACT 2611, Australia.

Fred Fish

F618 VCLI – Amiga voice recognition system which recognises 48 commands. Requires Perfect sound 3 or Sound master
F579 OCTAMED – The 8 Channel version of Med
F598 SUPERDUPER V2.01 – Very fast disk copier.
F568 CALORIEBASE – Work out how many calories you're consuming.
F577 LHA – Very fast archiver compatible with LH ARC.
F572 MULTIPLOT – Data plotting program.
F582 DIPLOMACY – Classic strategy game based on WWI.
F599 CRYSTALS – Computer simulation of 3D crystal lattices.
F606 SPELLCHECK – Test you on foreign words.
F604 RINGWAR – Classic arcade action game.
F608 VERTEX – Briliant 3D object editor.

75p

Star Trek

D089 STAR TREK ANIM – T. Richter's amazing 3D animation.
D121 ENTERPRISE LEAVING DRY DOCK – Another Richter classic animation.
G001 (2 disks 1Mb) ALL NEW STAR TREK – The best Star Trek game to date.
G220 (3 disks - 2 drives) – Visually impressive & entertaining game.
G064 (2 disks - 2 drives 1 Mb) – US Star Trek - Another very good game.
D419 (2 disks - 2 drives 1 Mb) STAR TREK MEGADEMO – Includes an animation and slideshow. Accompanied by sound. V Good.
G041 TREK TRIVIA – How much do you really know.
T052 TREK TRIVIA V6 – More searching questions.
U306 (2 Disks) THE FINAL FRONTIER – Highly praised disk magazine. Highly recommended.
U400 (3 Disks) THE FINAL FRONTIER VOL2 – Masses of infor., slides and anims. A must for all Trekkies.

We now have FRED FISH 1-650

Animations

D237 Phenomena Demo
D314 Girls on Film
D448 Mr. Potato Head – The chips are up
D121 Star Trek Animation
D451 Virtual Worlds
D423 Walkers Amy (1Mb)
D112 Stealthy II
D321 Strip Slot Machine
D185 Elvira Activities
D316 Maria Whitaker Anim (1Mg)
D436 P.D Animations

Music

M341 Shadow Music Disk – Well put together, original tracks.
M342 Expressions 2 – 4 brilliant long rave tracks. Outstanding.
M343 Manic Raves 2 (4 disks) – Probably the best rave music around. Accompanied by great graffix. A must.
M344 Hit The Decks (2 disks 1Mb) Mark has come up with 2 great rave tracks
M345 I Love to smoke Marajuana – Pumping rave music.
M346 Wacko Jacko (1Mb) – features Black and White and It's So Mental
M348 500 Things Fight Back – Great original music.
M349 Technomania 2 – An absolute must for all rave fans.
M350 BCB Music Disk – Good original scores.
M351 Zero-G – Demo sample disk – Great sounds for use in Noisetracker type progs.

We now have T-BAG 1-61

Games

G357 TETRIS CLONES – Really enjoyable derivatives.
G358 AIRMANIA – Win a trip of a lifetime.
G359 EXILE GAME PACK DISK 1 – Great collection of games.
G360 BATTLE OF BRITAIN – Not yet seen.
G361 CARD SHARP – Not yet seen.
G362 GALLACTIC FOOD FIGHT – Great shoot-em-up.
G363 RAPHAELS REVENGE – Turtle fun.
G364 GROWTH – Blitz that expanding brain.
G365 MISSION X – Not yet seen.
G366 JETMAN – Version of Spectrum game.
G367 GAMES BLITZ – Compilation of Spaley games.

The following games have been reviewed and given 80% or over:

G369 CABERET ASTEROIDS – Direct copy of arcade asteroids.
G370 AMIGOIDS – Fab graphics on the asteroids clone.
G371 SEVEN TILES – Futuristic football style game.
G373 LADYBUG – Variant on the old Pacman classic.
G374 AMIGATRATION – A collection of brilliant mind games.
G377 STORYLAND II – Brilliant role play game.
G001 ALL NEW STAR TREK (2 DISKS – 2 DRIVES – 1MG) – The best Star Trek game around.
G278 AIR ACE II – Enjoyable shoot'em up in planes.
G210 AIRWAR – A large number of flight simulators.
G051 FRANTIC FREDDIE – Brilliant platform game.
G310 SURVIVOR – Outstanding role play game.
G086 PROPERTY MARKET – Find out if you've got a head for business.
G292 SEALANCE – Highly praised submarine game.
G321 SCUM HATERS – Blast the scum out of East London.
G220 STAR TREK (3 DISKS – 2 DRIVES 1MG) – Very impressive.
G277 TRUCKIN' ON (2 DISKS) – Enjoyable strategy game.
G268 WHEEL OF FORTUNE – Excellent version of TV prog.
G342 DOWNHILL CHALLENGE – Great fun skiing game.
G343 POM POM GUNNER – Shoot down those enemy planes.
G349 SIMON SAYS SPACE MATHS – Get your kids to learn sound/colour/maths.
G350 EDUCATION FOR UNDER 10's – Loads of enjoyable/educational games.
G353 DARK STAFF – Spectrum adventure game now shareware – very entertaining.
G354 AMIOMEGA – Absolutely outstanding role play game.
G355 HOLLYWOOD TRIVIA – Very fine quiz game.
G304 TEXT ADVENTURE GAMES PACK (4 disks) – Over 10 great games including Survivor and Star Trek.
G099 ULTIMATE PLATFORM GAMES – Whizzy's Quest & Mayhem Miner.
G338 NO MANS LAND – Brill 2 player combat game.
G339 GAMES BONANZA – 22 Games on one disk – Amazing!
G344 LLAMA COLLECTION – Llamatron + Metagalactic Llamas.
G345 SHOOT 'EM UP PACK – Includes Star Trek and Retaliator & more great fun.

Games compilations

GAMES GALORE VOL 1 – Drip, Bally, Yahtzee, Tic Tac Toe, Amoeba, Othello, Tron, Chess, Tiles, Daleks.
GAMES GALORE VOL 2 – Sky-Fight, Kap-Othello, Lam, Jallard, Bouncer, Bluemoon, Welltrix, Wordsearch.
GAMES GALORE VOL 3 – Asteroids, Gravity Wars, Ping Pong, Orbit 3-D, Miniblast, MM, Gravattack.
GAMES GALORE VOL 4 – Cat, Mr Munk, Backgammon, Egyptian Run, Mutants, Spaceace, Diplomacy, Game Cheats.
GAMES GALORE VOL 5 – Trektrivia, Monopoly, Cosmo, Mazeman, Sys, Pharoh, Dad, Cat & Mouse, Rollon.
GAMES GALORE VOL 6 – Jumpy, King, Raps, Crabots, Death, SB, Tiny, ATC.
GAMES GALORE VOL 7 – Trainset, Yawn World, Montana, Amiga Worm, Pipeline, Mines, Bounce.
GAMES GALORE VOL 8 – Game Timer, Space War, Colossal, M Command, Trippin, Cave Runner, Spaces.
MEGA GAMES VOL 1 (A) – Battlemech, Bullrun, Superbreakout, Egyptian Run.
MEGA GAMES VOL 1 (B) – Cos, Stonerage, Othello, Q Bert, Crystal Vision.
MEGA GAMES VOL 1 (C) – Hack, Saved Games, Tourist, Knight, Caveman, Spellologist, Wizard, Fighter.
MEGA GAMES VOL 1 (D) – Monopoly, Puzzle, Asteroids, Deluxe Burger, Mercenary.
MEGA GAMES VOL 1 (E) – Four, Iff 2 Pos, Missile Command, Invaders.
MEGA GAMES VOL 1 (F) – Battle, Tri, Descender, Tiles, PA Cannon.
MEGA GAMES VOL 2 (A) – 17 Fantastic Games.
MEGA GAMES VOL 2 (B) – Castle, Bally II, Chess.
MEGA GAMES VOL 2 (C) – World, Billiards & Trix.
MEGA GAMES VOL 2 (D) – Clue, Wordsearch, Sorry & Wheel.
ASSASSINS GAMES 1 – Tanx, Rollerpede, Amigoids, Caverunner, Avatris.
ASSASSINS GAMES 2 – Girl Action, Missile Command, Invaders, Bally 2, Maze Game, Think, Aneud

Send £1 now for our new format catalogue giving details of around 1,500 disks including 500(+) compatibility where possible plus loads more.

Mouse Mats available for £2.99 each

Printer out of puff? Computer cracking up? We're here to help!

AMIGA COMPUTING ADVICE SERVICE

Write to ACAS, Amiga Computing, Europa house, Adlington Park, Macclesfield SK10 4NP

Save your saes – we can't reply personally

Stevie's big boobie!

I am following your excellent Beginners' Guide series, but I have a problem with part three.

I followed the instructions in your column and when I came to boot up MyDisk all I got was the Commodore copyright message, then the error message:

```
LOADWB FAILED RETURN CODE 20
```

Could you please tell me where I am going wrong?

Jeff Davies, Rhonda

You're doing nothing wrong at all – it's our so-called expert who's messed things up. You see, before Workbench can load it has to have access to the icon.library file which should always be in the LIBS directory of the disk you're trying to boot from.

Stevie Kennedy, who would like me to pass on his object apologies to all those following the series, forgot to mention this, with the result that none of your disks will successfully boot.

If you caught the June column, you'll have noticed that he sneakily tried to make it look as if he'd meant to leave out the icon.library. Nice try, loser!

Tool types

Like many others I am new to the Amiga, having bought an A500 Plus at Christmas. I have been trying to assemble a disk of utilities and useful tools, most of them programs from your CoverDisk such as AddTools, Print Spooler, Last Hope, and so on.

I have got as far as opening drawers on a newly formatted disk with Workbench in place, and the utilities seem to copy across, but on trying to select them from the new disk I get a warning saying:

```
UNABLE TO OPEN YOUR TOOL :C/MMPP
```

I haven't a clue what to do about this. Can you help?

Mr P Southey, Westergate

The problem lies in the fact that not every program represented by an icon is completely independent. Many need other files to be present on the disk before they can run.

In your case, the file in question is the text viewer MuchMore_PP (MMPP for short) which we use on every CoverDisk to enable users to read an author's doc files.

To remedy the situation, you'll have to copy MMPP to the new disk. Let's say your new disk is called NewDisk and you are using the latest CoverDisk. To carry out the copy, boot from Workbench, open Shell, and type:

```
COPY COVERDISK33:C/MMPP TO NEWDISK:C
```

Now when you double click on a doc icon, the correct tool will be available and you'll be able to read the file.

Solder job

I have an Amiga 500 revision 6A which I upgraded to 2Mb using the 1.5Mb PC502 expansion from Power Computing. I also have a fatter Agnus which supports 1Mb chip RAM.

The expansion was wired in the 1Mb chip RAM mode as detailed in the manual and it configured correctly as 1Mb chip and 1Mb fast, which I was able to check using the AVAIL command. However, when I load DigiView 4 or DPaint 4 and try to access the various resolutions, the computer crashes.

I hasten to add that both programs work perfectly when the expansion is wired in the normal mode for 0.5Mb chip and 1.5Mb fast RAM.

Can someone offer a solution?

Charles Haber, Santa Lucia, Malta

To eliminate one of the possible culprits, it at least doesn't sound as if you have damaged RAM chips. If this were the case, your paint programs would crash no matter which configuration you used the RAM card in.

The PC502, in common with every other 1Mb chip RAM expansion board, requires the user to solder a link on jumper JP2.

If you have a badly soldered link you will have plenty of crash problems, though they should happen all the time rather than just on certain packages.

As long as the RAM is configuring at all and you've soldered the joint properly – as well as making very sure that the link between the other two pads on JP2 has been cleanly cut – the only problem can be with the board's control chip.

In this case, if you send it back to Power Computing, they should replace it for you.

Productivity mode

I own an A500 Plus and I am considering buying a multisync monitor so that I can use Productivity mode.

Not many companies seem to be advertising this type of monitor, and I am at a loss as to which is the best for performance and value.

I presume that the multisync monitor should be able to display the normal hi-res and super hi-res modes without difficulty, but the only models I have seen advertised are the Commodore, Interquad, and Panasonic monitors.

I understand that none of these provide sound output like my 1084S. Also, would I have to get a special lead for this type of monitor – where would I get one?

Chris Thompson, Orpington

Commodore, rather predictably, recommend that you use one of their own 1950 monitors with Productivity mode. These are high quality monitors and can handle any of the Amiga's video modes, including the new ones.

Connecting the monitor will be a problem, as your standard 23-pin video port will not talk to the monitor's 15-pin cable. To connect a Commodore multisync to your A500 Plus, you'll need a converter which, happily, is supplied with every 1950 multisync making them the most appealing buy from your point of view.

New virus?

I have an A500, an A590, 1.5Mb RAM expansion, Star LC200c, and external floppy. I have installed Virus Checker on my hard drive and have not found any viruses, but recently I found that I could not format or copy disks. When I tried to format a blank floppy I was given the error message:

```
INITIALISATION FAILED. BAD SECTOR.
TRY A DIFFERENT DISK
```

Also, any disks that I had already formatted and tried to reformat gave the same message and became unreadable. Then half my software collection mysteriously became unreadable.

I thought it was a virus, but Virus Checker has not reported one. Please help.

Paul McClean, Cookstown, N Ireland

There are two possibilities. Either your internal drive is damaged and will need to be replaced, or you have been given a "trojan horse" copy of Virus Checker. By this I mean a hacked copy which pretends to be the original program but which in fact contains a deadly virus.

Several trojan variations of VirusX were floating around last year, but I've yet to come across a wooden equine version of Virus Checker. This leaves the possibility that your internal drive has packed in.

If you get a lot of read/write errors and other disk-related problems, then the internal drive is probably the cause of the problem.

If, however, the bad sector error is the only one you're getting, I'd seriously consider laying hands on a different version of Virus Checker to check the first one.

You could, of course, have fallen prey to a new virus, so I'd be obliged if you could send us a disk containing your version of Virus Checker and a floppy which is suffering from the bad sector disease so we can check it for ourselves.

If we find a completely new virus, there's a free subscription in it for the person who alerts us to the danger.

AMIGA SUPERMARKET

Official government & educational establishment orders welcome.

FAST MAILORDER SERVICE SAMEDAY DESPATCH * ALL POPULAR AMIGA PRODUCTS STOCKED

DESK TOP VIDEO PERIPHERALS

VIDI The Complete Solution	£139.99
VIDI	£89.99
RGB SPLITTER Rombo Electronic type	£57.99
ROCGEN GENLOCK SAVE £££s	£99.99
ROCGEN PLUS GENLOCK	£149.99
FRAMEGRABBER	£519.99
SUPERPIC - Colour Digitiser & Genlock	£499.99
SUPERPIC ANIMATE PRICE DOWN	£629.99
COLOURPIC colour digitiser	£399.99
COLOUPIC ANIMATE PRICE DOWN	£529.99
CABARET FOR COLOURPIC/ SUPERPIC	£28.99
CABARET PLUS	£87.99
DIGIVIEW GOLD the best with a camera	£99.99
RENDALE 8802 GENLOCK	£149.99
RENDALE SUPER 8802 SVHS GENLOCK	£499.99
HITACHI MONO CAMERA.LOW PRICE	£179.99

AMIGA ROM SWITCH

NOW ONLY £19.99

KEYBOARD OPERATED VERSION £27.99
NO EXTERNAL SWITCHES.

EMULATORS, INTERFACES, MEMORY CARDS & SPARES

KICKSTART 1.3 ROM	£29.99
KICKSTART 2 ROM NOW	£59.99
AS ABOVE PLUS MANUALS	£79.99
FATTER AGNUS 8372A	£69.99
SUPER DENISE	£39.99
GARY	£31.99
8520A I/O chip	£15.99
1500/2000 8MEG CARD unpop uses simms	£79.99
ST506 CONTROLLER FOR A500	£79.99
1500/2000 SCSIDRIVE CONTROLLER	£89.99
1500/2000 IDE DRIVE CONTROLLER	£84.99
A500 SCSI CONTROLLER & HOUSING	£129.99
A500 IDE CONTROLLER & HOUSING	£119.99
A520 MODULATOR	£29.99
UPRATED A500 POWER PACK NOW	£39.99
KCS PC BOARD v3 + MSDOS 4	£204.99
KCS WITHOUT MSDOS	£189.99
KCS 2000 PC BOARD ADAPTOR	£64.99
AT ONCE + 16MHz PC EMULATOR	£219.99
256*4 CMOS D RAMS each £4.25 or	£32/meg
1meg * 9 SIMMS 70 or 80 ns	£31.99
AMIGA INTERNAL DRIVE NOW	£59.99
MAINS SUPPRESSOR BLOCK 4WAY	£12.99

MICE, JOYSTICKS, SCANNERS, TRACKBALLS & CDTV ACCESSORIES

SPEED MOUSE	£15.99
NAKSHA MOUSE + OPERTN STEALTH	£24.99
CDTV KEYBOARD - BLACK	£49.99
CD TV TRACKBALL CONTROLLER	£77.99
ZYDEC AMIGA SCANNER	£99.99
GRAVIS MOUSE STICK CONTROLLER	£65.99
DELTA 3A ANALOGUE JOYSTICK	£14.49
ZIPSTICK AUTOFIRE	£12.99
QUICKJOY SUPERSTAR	£13.99
QUICKSHOT TOPSTAR	£19.99
QUICKSHOT INTRUDER JOYSTICK	£29.99
MEGA STAR HEAVY DUTY JOYSTICK	£26.99
NAVIGATOR AUTOFIRE JOYSTICK	£13.99
SPEEDKING AUTOFIRE	£11.99
QUICKJOY PYTHON	£10.99
ZYDEC AMIGA TRACKBALL	£34.99
CRYSTAL TRACKBALL	£39.99
PHAZER LIGHT GUN PACK	£34.99
OPTICAL MOUSE	£38.99

NAKSHA AMIGA MOUSE +

OPERATION STEALTH **£24.99**

DIGIVIEW MEDIASTATION
DIGIVIEW + DIGIPAINT 3 + ELAN PERFORMER

BARGAIN OFFER - £129.99

AMIGA BOOKS

^ = PRICE INCLUDES PROGRAM DISK

AMIGA FOR BEGINNERS	£16.99
AMIGA BASIC INSIDE & OUT	£18.45
AMIGA SYSTEM PRO GUIDE	£32.45
AMIGA ADVANCED SYSTEM PROGRAMMERS GUIDE	£32.45
AMIGA DISK DRIVES I & O	£27.95
AMIGA DOS INSIDE OUT	£19.99^
AMIGA PRINTERS I & O	£31.95
AMIGA DESKTOP VIDEO	£23.95
AMIGA 3D GRAPHICS	£17.95
MAKING MUSIC ON AMIGA	£27.99 ^
AMIGA GRAHICS I& O	£31.95
AMIGA MACHINE LANGUA	£14.45
AMIGA C FOR BEGINNERS	£16.99
AMIGA C FOR ADVANCED PRORAMMERS	£27.99
AMIGA DOS MANUAL	£19.95
KIDS & THE AMIGA	£15.95
BEST AMIGA TRICKS & TIPS	£27.45^
MAPPING THE AMIGA	£24.95
MACHINE LANGUAGE FOR BEGINNERS	£19.95
ELEMENTARY AMIGA BASIC	£14.95
ADVANCED AMIGA BASIC	£16.95
PROGRAM DESIGN TECHNIQUES ON THE AMIGA	£16.95
USING AREXX ON AMIGA	£27.99
FIRST BOOK OF THE AMIGA	£16.95
AMIGA ASSEMBLY LANGUAGE PROGRAMMI NG	£14.45
USING DELUXE PAINT	£19.95
AMIGA VISON HANDBOOK	£23.45
THE IMAGINE COMPANION	£24.95^
HARDWARE REF MANUAL	£21.95
68000 ASSEMBLY LANGUAGE PROGRAMMING	£24.95
AMIGA ROM KERNEL REFERENCE BOOKS - 3 AVAILABLE - each	£28.95
DELUXE PAINT VIDEO	£19.99
SUPERBASE - THE BOOK	£11.49

I&O = ABACUS 'INSIDE & OUT' SERIES.

SEAL n TYPE KEYBOARD SKIN.

Moulded to cover each key, but flexible enough to type throuh & waterproof.

AMIGA 5 00 & PLUS (state which when ordering please)	£12.49
1500/2000	£12.99

ANTISTATIC DUST COVERS

AMIGA 500 & 500 Plus	£4.99
AMIGA 1500/2000 2PIECE	£12.99
8833/1084 MONITOR	£7.99
SWIFT 9, LC200 PRINTER	£7.99

OTHERS TYPES AVAILABLE

DISKS & DISK BOXES

250 SIZE BANK BOX	£24.99
150 SIZE POSSO BOX	£19.99
40/50 SIZE LOCKABLE BOX	£6.99
20 SIZE DISK HOLDER	£2.99
80 SIZE LOCKABLE BOX	£7.99
100 SIZE LOCKABLE BOX	£8.99
TDK BRANDED DISKS PACK OF 10 DS/DD INCLUDING LABELS.	£7.99
FUJI BRANDED, PACK OF 10 + FREE HQ AUDIO CASSETTE TAPE	£8.49

SALES: 0274-691115

EDUCATIONAL COMPENDIUM 6

SPECIAL BOXED SET COMPRISING:
KIDS TYPE,
WEATHER WATCHER,
CALENDAR QUIZ,
WORDS & NUMBERS,
GAME SET & MATCH
WHAT IS IT WHERE IS IT ?

NOW ONLY £37.99

X COPY PRO

Latest version - £33.99 complete
with Cyclone ext ernal drive adaptor.

X COPY CYCLONE

ADAPTOR £12.99

AMI SUPERCARD in stock again at £34.99

(Requires an external drive)

NB. Making backups without the permisiion of the copyright holder is illegal.

OTHER DISK UTILITIES

ACTION REPLAY FOR A500	£57.99
ACTION REPLAY FOR 2000	£67.99

MOUSE / JOYSTICK PORT SWITCH NOW JUST £12.99

* Has sockets for mouse & joystick.
* Push button selects mouse or joystick.
* Uses no power unlike other types.
* Compatible with many dongles.
* Saves wear & tear on mouse port.

SUPER-Fi ONE STEREO SYSTEM

* POWERFUL 12 wattts / CHANNEL
* COMPACT BOOKSHELF CABINET
* 3" WOOFER + 1" TWEETER
* BASS REFLEX PORT
* 30Hz - 20kHz RESPONSE
* BUILT-IN MAINS POWER UNIT
* REMOTE VOLUME CONTROL.

THE BEST SOUNDS AROUND FOR YOUR MONEY

ONLY £34.99 COMPLETE

SOUND BLASTER	£44.99
ZYFI	£34.99

SUPER-Fi TWO STEREO SYSTEM

* MASSIVE 20 watts /channel.
* BASS, TREBLE & VOLUME CONTROLS
* 4" WOOFER, 2" TWEETER
* BASS REFLEX PORT boosts low frequencies
* MAINS POWERED - no separate psu

THE ULTIMA TE SOUND SYSTEM FOR COMPUTERS, STEREO VCRs, SATELLITE SYSTEMS, PERSONAL STEREOS ETC

ONLY £59.99 COMPLETE

MIDI INTERFACE 2

Our unique 5 port Midi interface 2 has In, Out &Thru sockets plus two additional switchable out/thru sockets for ingenious versatility. Complete with free midi lead. Fully compatible with Sequencer One, Music X, Deluxe Music, Tiger Cub, Bars & Pipes etc etc. NOW ONLY £26.99

MIDI 2+ MUSIC X Junior £59.99
Extra Midi lead 1.2m £1.49
Extra Midi lead 3m £1.99

SAMPLER 2

Our Superb sounding STEREO SAMPLER 2 uses a state of the art A/D chip which samples so fast, It captures every detail of the sound. Easily adjusted level control, connecting lead & free stereo sampling software. Fully compatible with all popular sampling software. NOW ONLY £37.99

Special offer.
Sampler 2 & Audition 4 £69.99

BARGAIN BASEMENT.

GFA BASIC 3.5	£9.99
PHOTON PAINT 2	£12.99
SUPERBASE PERSONAL 2	£29.99
10 STAR GAMES PACK	£24.99
20 SIZE DISK BOX	£2.99
STEREO HEADPHONE AMP	£14.99

VAST SOFTWARE RANGE

ALL SOFTWARE IS UK SOURCED.

ADVANTAGE NOW	£69.99
AMI ALIGNMENT	£29.99
AMAS 2	£89.99
AMIGA VISION	£89.99
AMOS	£34.99
AMOS - EASY NEW	£28.99
AMOS 3D	£25.99
AMOS COMPILER	£22.99
ART DEPARTMENT	£49.99
ART DEPARTMENT PRO	£149.99
ASSSEMPRO	£59.99
A TALK III	£39.99
AUDITION 4 superb value	£37.49
AUDIOMASTER 4	£49.99
AUDIO ENGINEER	£169.99
BARS & PIPES	£99.99
BBC EMULATOR	£29.99
BROADCAST TITLER 2	£167.99
CAN DO 1.6 NEW	£69.99
CASH BOOK CONTROLLER	£52.49
CROSS DOS	£21.99
DAY BY DAY	£22.49
DELUXE PAINT 4	£57.99
DELUXE MUSIC	£49.99
DELUXE VIDEO 3	£74.99
DEVPAC 3 - new version	£51.99
DG CALC	£29.99
DIGIPAINT 3	£39.99
DIRECTORY OPUS	£29.99
DISK MASTER.	£29.99
DISK MASTER 2	£49.99
DISNEY ANIMATION STUDI	£59.99
DOCTOR AMI	£29.99
DR Ts TIGER CUB A GIFT	£49.99
DR TS KCS LEVEL II	£199.99
ELAN PERFORMER 2	£44.99
E TYPE	£29.99
EASY AMOS NEW	£28.99
EXCELLENCE	£59.99
FINAL COPY PRICE DOWN	£47.99
FLOW v3.0	£54.99
FLIGHT SIMULATOR II	£29.99
FONT GRABBER	£37.49
GB ROUTE PLUS	£59.99
GOLD DISK OFFICE NOW	£69.99
HIGH SPEED PASCAL	£74.99
HISOFT BASIC	£47.99
HISOFT BASIC PROFESS	£59.99
HOME ACCOUNTS 2	£39.99
HOMEBASE	£24.99
HOTLINKS NEW	£53.99
HYPERBOOK	£44.99
IMAGINE 2 NEW	£199.99
IMAGINE COMPANION	£24.95
INFOFILE	£29.99
INTROCAD PLUS	£74.99
KINDWORDS	£37.49
LATTICE C v5	£159.99
MACRO 68000 ASSEMBLER	£39.99
MAILSHOT PLUS	£37.49
MEDIA SHOW	£51.99
MEGAMIX MASTER NEW	£32.99
MUSIC X v 1.1 BARGAIN	£54.99
MUSIC X JUNIOR	£39.99
PAGESTEAM 2.1	£139.99
PAGE SETTER 2	£44.99
PEN PAL STILL ONLY	£54.99
PERSONAL TAX PLANNER	£29.99
PERSONAL FINANCE MANG	£23.99
PIXMATE	£34.99
PROFESSIONAL CALC	£139.99
PRODATA NOW	£69.99
PROFESSIONAL DRAW 2	£94.49
PROFESSIONAL PAGE 3	£167.99
PROTEXT v 5.5	£104.99
PRO VIDEO PLUS	£174.99
PROWRITE v 3.2	£79.99
QUARTERBACK	£38.99
QUARTERBACK TOOLS	£44.99
QUARTET	£34.99
REAL 3D BEGINNERS	£79.99
SCALA 500 PRICE DOWN	£69.99
SCRIBBLE PLATINUM	£37.49
SCULPT 3DXL	£89.99
SCULP ANIMATE 4D JNR	£79.99
SONIX	£33.49
SOUNDMASTER	£99.99
STEREO MASTER	£29.99
SUPERJAM NEW	£69.99
SUPERBASE PROF 4	£199.99
SUPERPLAN	£49.99
SYSTEM 3	£44.99
SYSTEM 3e new version	£59.99
TAKE 2	£69.99
TECHNOSOUND NEW	£31.99
TOPFORM NEW	£57.99
TRANSWRITE	£28.99
TURBOPRINT PRO ONLY	£35.99
TV SHOW	£57.99
VIDEO EFFECTS 3D	£99.99
VIDEOSCAPE 3D	£59.99
VIDEO TITLER 3D	£67.49
VIDEO DIRECTOR	£104.99
WORD PERFECT 4.1	£149.99
WORDWORTH 1.1	£79.99
3D CONSTRUCTION KIT	£37.49
3D PROFESSIONAL	£149.99

MOST EDUCATIONAL SOFTWARE ALSO STOCKED PLEASE PHONE FOR DISCOUNT PRICES

AMIGA SUPERMARKET

TRILOGIC,
UNIT 1, DEPT AC7,
253 NEW WORKS RD,
BRADFORD, BD12 0QP

We're easy to find, just 1.5miles from the M62. Directions.
Leave M62 at junction 26, take A638 to Braford, uphill, after about 1.5 miles, turn left just over a railway bridge. After 1/4mile, look for us opposite a Royal Mail letterbox.
FAX 0274 - 600150

HOW TO ORDER. ALL PRICES INCLUDE VAT Commodore dealer since 1894

BY PHONE: Simply phone us with your Access or Visa number (inc Connect & bank debit cards).
SAMEDAY DESPATCH if goods are in stock & orders are received before 3pm.
You are not charged until the goods are despatched.
BY MAIL. Send cheque, (made payable to TRILOGIC), POs, or your c/card number & expiry date, order details, & name, address & phone number to the address above.
POSTAGE: Nominal post & packing charge - £1 to orders under £100, £2 to orders over £100. If your order is over £100 we strongly recommend Parcelforce 48 or Overnight delivery.
PARCELFORCE 48 delivery - £3.50 extra.
OVERNIGHT CARRIER delivery - £5.50 extra. (Please allow more time for outlying areas; Uk mainland weekday delivery only.) Saturday delivery available £20 extra.
EXPORT ORDERS WELCOME. no vat - deduct 171/2%, but add carriage at cost.
CALLERS MOST WELCOME: Open Mon-Fri 8 till 6, Sat 8-4pm.
Please phone to check availability before calling.

ASK FOR FREE PRICE LISTS

AMIGA SUPERMARKET

We despatch 100s of orders per week from our range of over 500 Amiga Products.

AMIGA 500 PLUS CARTOON CLASSICS

BUILT-IN DISK DRIVE
1 MEG RAM
MOUSE
TV MODULATOR
WORKBENCH 2.
BUILT-IN CLOCK

LEMMINGS
THE SIMPSONS
CAPTAIN PLANET
DELUXE PAINT 3

LOW COST 3 & 5 YEAR EXTENDED WARRANTIES AVAILABLE. PLEASE SEE BELOW.

£329.99*

with 2meg £369.99*

* Please phone tocheck our latest low price.

STOP PRESS AMIGA 600 £?? PHONE FOR PRICE
AMIGA 600HD £??

COLOUR MONITORS

PHILIPS CM8833 mk 2 UK MODEL with F19 & On site warranty NEW LOW PRICE	£209.99
COMMODORE 1084S	£229.99
AOC CM326 MULTISYNC HIRES	£329.99
TV TUNER - use your monitor as a tv.	£39.99

When purchased with 8833 or 1084 monitor or £50 with AOC. (£5 more if bought separately)

MONITOR ACCESSORIES

MONITOR PLINTH WITHOUT SHELF	£23.99
MONITOR PLINTH WITH SHELF	£33.99
DELUXE WORK CENTRE including overall dust cover, mouse mat & holder, joystick/mouse extension set	£49.99
14" MONITOR TILT/SWIVEL BASE	£12.99
MONITOR DUST COVER state monitor	£7.99
SCART SWITCH - effectively gives your tv or monitor two scart sockets Enables ANY two scart leads eg Amiga & vcr, to be connected to one scart socket. Fully switched.	£19.99

AMIGA TV/ MONITOR LEADS.

AL1 for most Scart tvs except some Goldstar & vcrs	£13.99
AL2 for Ferguson MC01/3/5 with 7 or 8 pin din skt	£12.99
AL4 for Hitachi/Granada with 7 pin RGB skt	£12.99
AL6 for Amstrad CPC monitor - with no sound	£11.99
AL6B fornew CPC monitor with stereo sound	£12.99
AL7 for 1084 monitor inc audiolead (6pin Din plug)	£14.99
AL7P for new 8833/1084s - 9 pin D plug	£14.99
AL11 for multisync with 9 pin skt on monitor	£11.99
AL11B for multisync with 9 pin plug on monitor	£11.99
AL12 for multisync (our lead has 15pin HD skt)	£13.99
AL13 for multisync (our lead has 15 pin HD plug)	£13.99
MODULATOR EXTENSION LEAD - Moves modulator so it does not protrude & eliminates loose connection.	£10.99
MODULATOR SPLITTER - Enables modulator & RGB lead to be connected at the same time - for taping Amiga	£16.99.
GENLOCK SPLITTER	£19.99
TV / COMPUTER AERIAL SWITCH	£8.99
COMPUTER / AERIAL EXTENSION LEAD 3m	£2.49

Many other leads available - please phone.
All leads include audio lead where applicable & are approx 1.8m long. Add £1.50 per metre for longer leads.

HARD DRIVES - NEW MODELS AT EVEN LOWER PRICES

DATAFLYER 500S 45meg scsi	£289.99*
DATAFLYER 500I 40meg IDE	£259.99 * NEW
DATAFLYER 500S 105meg scsi	£419.99*
DATALFYER 500I 105meg IDE	£389.99* NEW
DATAFLYER 2000S 45meg scsi	£259.99*
DATAFLYER 2000I 40meg IDE	£229.99* NEW
DATAFLYER 2000S 105meg scsi	£389.99*
DATAFLYER 2000I 105meg IDE	£359.99* NEW

Available soon - IDE version with 8meg on board ram option, & external power supply - about £40 extra.

FIT YOUR OWN DRIVE: IDE (AT) OR SCSI

DATAFLYER 500S HOUSING & SCSI INTERFACE	£129.99
DATAFLYER 500I HOUSING & IDE INTERFACE	£119.99 NEW
DATAFLYER 2000S SCSI INTERFACE	£89.99
DATAFLYER 2000I IDE INTERFACE	£84.99 NEW

* DRIVE SIZES QUOTED ARE APPROXIMATE FORMATTED SIZES & MAY VARY SLIGHTLY DEPENDING UPON MAKE OF DRIVE FITTED. New IDE versions work with most IDE drives.

COMMODORE A590+ A590 UPGRADES

A590 + (no ram) 20meg drive. Add £30/meg for onboard ram	£279.99
A590 52meg QUANTUM SCSI upgrade - easy to fit	£209.99
A590 120meg QUANTUM SCSI upgrade - easy to fit	£349.99
A590 45meg NEC SCSI upgrade - easy to fit	£189.99
A590 105meg NEC SCSI upgrade - easy to fit	£299.99

PRINTERS

2 year Warranty. Prices are for b/w versions

CITIZEN 120D+ now down in price	£129.99
Good budget 9 pin, with tractor & friction feeds.	
CITIZEN 224D (24pin - colour option)	£224.99
Low price 24pin with colour option.	
CITIZEN SWIFT 9 (colour option)	£169.99
CITIZEN SWIFT 9X B/W wide carriage	£257.99
Top selling, supreb quality 9 pin printers.	
CITIZEN SWIFT 24E (colour option)	£259.99
CITIZEN SWIFT 24X wide carriage	£379.99
Unbeatable quality, great value, cheap ribbons.	
CITIZEN PRODOT 9 - PROF QUALITY	£199.99

FOR COLOUR KIT to convert 224D, SWIFT 9, PRODOT 9 & SWIFT 24, to colour, add just £20.00. Add £30 for colour kit for 9X & 24x. (Colour kit contains ribbon & ribbon motor unit)

CITIZEN PROJET INKJET PRINTER	£399.99
Special introductory price - 300dpi Laser quality. Fast & very quiet, A4 sheet feeder available.	
CANON BUBBLEJET BJ10EX	£269.99
RIBBON REINKING SPRAY - SAVES £££S	£11.99 .

PRINTER ACCESSORIES

UNIVERSAL PRINTER STAND - open frame type with paper holder for all 80 column printers.	£12.99
TWO PIECE PRINTER STAND for any printer	£7.99
80 COLUMNPRINTER DUST COVER state printer	£7.99
COPY HOLD - FREE STANDING OR CLAMP	£16.99
60grm Fan fold 11x9.5" paper in box of 2000 sheets	£21.99

EXPAND YOUR AMIGA'S PRINTER PORT...

AMIGA PRINTER PORTEXTENDER - 2WAY	£24.99
AMIGA PRINTER PORT EXTENDER - 3WAY	£27.99
AMIGA PRINTER PORT EXTENDER - 4WAY	£33.99

Above Printer port extenders include cable worth £10.99 to connect them to Amiga. They are fitted with sockets identical to the Amiga's printer port - so your printer cables & other peripherals just plug straight in. Fully switched

PRINTER SHARER - 2WAY inc free lead	£27.99
PRINTER SHARER - 3WAY inc free lead	£29.99
PRINTER SHARER - 4WAY inc free lead	£34.99

These have sockets as fitted to printers (36w centronics) & enable one printer to be used with several computers. Lead to connect switch to printer included.

AMIGA PRINTER PORT LEADS

AMP1 1.8m long for all parallel printers	£?.99
AMP 2 3m longfor all parallel printers	£12.99
AMP 3 5m long for all parallel printers	£16.99
PRINTER PORT EXTENSION LEAD (M-F)	£10.99
PRINTER PORT TO SWITCH LEAD (M-M)	£10.99

CHEAPER GVP PRODUCTS

GVP SERIES II HD8 FOR A500 - NO DRIVE	£149.99
GVP SERIES II HD8 + 52 Quantum for A500	£349.99
GVP SERIES II HD8+ 120 Quantum for A500	£469.99
GVP SERIES II HC8 HARD CARD - NO DRIVE	£129.99
GVP SERIES II HC8 + 52meg HD for 1500/2000	£279.99
GVP SERIES II HC8 + 120meg HD for 1500/2000	£409.99
1MEG SIMMS FOR GVP (4meg max) each	£31.99

HARD DRIVE UNITS	SCSI	IDE (AT)
NEC 45MEG	£189.99	£169.99
NEC 105MEG	£299.99	£259.99
QUAMTUM 52MEG	£20.9.99	£189.99
QUANTUM 120MEG	£349.99	£279.99(105meg)

Use a redundant XT drive on an Amiga500.

The Cumana ST506 xt Drive interface with 1/2meg ram & on board clock, fits into the 1/2 meg slot, & enables most ST506/ ST412 drives to be used. (Drive power supply & housing not included) £79.99

AMIGA PLUS 1.3 COMPATIBILITY.

We can install a rom sharer, with 1.3 workbench rom, & if you need more faast ram, our Baseboard Plus memory upgrade. There is no fitting charge if done prior to purchase, however, the Commodore warranty will be invalidated, so we recommend an Extended warranty be taken out.

SUPERB 10 STAR PACK just £39.99 extra with any Amiga
MICROSWITCH JOYSTICK
10 DISKS, LABELS & BOX
MOUSE MAT
TAILORED DUST COVER
PLUS 10 GREAT GAMES:
DUNGEON QUEST
SOCCER
KID GLOVES
RVF HONDA
POWER PLAY
SHUFFLE PUCK CAFE
TOWER OF BABEL
DATASTORM
E MOTION
GRAND MONSTER SLAM

AMIGA 500 1.3 Base Model

Amiga 500, 512k ram, workbench 1.3, psu, mouse, tv modulator & instruction manuals. No extra software. Add £20 for extra 1/2 meg (without clock) ONLY £289.99

SPECIAL BONUS PACK.
AMIGA 500 1.3 as above
+ PHOTON PAINT 2 + GFA BASIC+ TEN STAR GAMES PACK (games only - excludes accessories) £299.99
HURRY - Limited stocks.

AMIGA 1500 Wkbench 2 £499.99

With 1meg ram, twin disk drives. + Software pack comprising: Dpaint 3, Home Accounts, The Works, Elf, Toki, Puzznic & 'Get the Most from Your Amiga'.
Add £60 if software pack required.

EXTERNAL DRIVES.

ROCLITE RF382C NOW	£55.99
ROCTEC $5^1/_4$" DRIVE	£89.99
CUMANA CAX 354	£58.99

All are Amiga PLUS, 600 & CDTV compatible.
All drives feature thru port & disable switch.

MEMORY UPGRADES

for your AMIGA PLUS

AMIGA 500 PLUS 1 meg upgrade £44.99
Just plugs in. No soldering.Warranty unaffected. Gives you 2 megs in total. (Made by Phoenix)

NOT ENOUGH FAST RAM ? You need a...

BASEBOARD PLUS unpopulated	£79.99
BASEBOARD PLUS with 1MEG	£99.99
BASEBOARD PLUS with 2MEG	£139.99
BASEBOARD PLUS with 4 MEG(max)	£199.99

Internal fitting - invalidates warranty - but can be covered by our Extended warranty plan, taken out at time of fitting by us.

for your AMIGA 500

A500 1/2megwithout clock	£23.99
A500 1/2megupgrade with clock	£27.99

LOW POWER, 4 CHIP DESIGN, WITH ON/OFF SWITCH. Just plug in, warranty unaffected, Amiga Plus compatible.

NEED EVEN MORE MEMORY ? Then fit a...
BASEBOARD 0.5 TO 4 MEG UPGRADE for Amiga 500

BASEBOARD UNPOPULATED	£79.99
BASEBOARD WITH 1MEG special price	£99.99
BASEBOARD WITH 2 MEGS	£139.99
BASEBOARD WITH 4 MEGS	£199.99
ZYDEC 1.5MEG UPGRADE fully populated	£75.99

Internal fitting, invalidates warranty. Uses low cost 256*4 D rams - £32/meg (8 chips)

for your AMIGA 1500 & 2000

2-8 MEG RAM CARD (unpopulated) £79.99
1meg x9 80ns simms now just £31.99 each. Requires2,4, or 8.

Our Extended Warranty & Insurance plan could save you ££s on accident & repair bills.

When you buy any computer, printer or monitor from us, we can offer you a low cost Extended Warranty with Accidental Damage Insurance. Underwritten by a leading Uk Insurance company. For example your Amiga 500 can be covered for three years from date of purchase for only £44.99, or £64.99 for five years from date of purchase. Covers all repairs & accidental damage, with very few exclusions. Must be taken out within 30 days of purchase. A typical Amiga repair costs at least £45 - & that's at today's prices - so you can't go wrong!

OAP & STUDENT DISCOUNT SCHEME

If you are an OAP or Bona fide full time higher education student (uni, college or poly), we will give you at least $2^1/_2$% discount off most items. Bring your Pension book, Student's Union card or Student Poll tax card if calling, or send a signed photocopy, & payment by Cheque, cash or PO only (not credit card). Please confirm price & availability before calling or ordering.

STOCKISTS OF CITIZEN COMMODORE PHILIPS PHOENIX CUMANA GVP AOC JCL ROMBO & ALL MAJOR SOFTWARE

SALES HOT LINES: 0274 - 691115. Lines open from 8am

NORTH-EAST AMIGA-USERS

* Don't send away for it............WAIT!
* Visit our showroom first for......

* A500 & 1500 Packs,
* Books, Software,
* Upgrades, Spares,
* Drives, Printers,
* Accessories
* Repair Service
* Advice
* Demo's
* Discs

AMIGA

Access

VISA

QUALITY OF SERVICE COMES FIRST AT:

Mon-Sat

9.30 to 5.00

091-510 3300

091-510 3939

Advance Electronics (NE) Ltd
1 Victoria Place, St Marks Road,
Millfield, Sunderland,
Tyne & Wear

AMIGA REPAIRS AND UPGRADES

Repairs from £23.00 inclusive.

Free registered carrier pickup and return despatch for ultimate peace of mind, anywhere on the UK mainland!

Free diagnostic inspection.

All repairs carried out are covered by free 90 day warranty.

Fast efficient service, average diagnostic and repair time 24 hours!

Experienced, qualified engineers.

Any upgrade fitting, fixed price £15.00 inclusive.

Terms and conditions available upon request.

ACS ELECTRONICS

Business Enterprise Centre, Eldon Street, South Shields, Tyne & Wear, NE33 5JE.

Telephone: 091 455 4300

SCHOOL SOFTWARE LTD.



THE THREE BEARS (5-10)
IBM, ST, CPC, AMIGA.
Superbly reviewed educational adventure. Develops reading and imagination.

MAGIC MATHS (4-8)
IBM, PCW, ST, AMIGA.
Highly rated primary maths programs. Selection of games. Add and Subtract.

MATHS MANIA (8-12)
IBM, PCW, ST, AMIGA.
"The best primary programs I have yet seen." Multiply, Divide, Maths Skills.

BETTER SPELLING (8-18)
IBM, ST, PCW, AMIGA, CPC, BBC, CBM(D).
Highly acclaimed tutor. Received excellent reviews. Challenging.

BETTER MATHS (12-16 GCSE)
IBM, PCW, ST, AMIGA, CPC, CBM(D).
Very comprehensive coverage of all the major aspects of maths for this age group. Excellent.

JUNIOR TYPIST (4-10)
IBM, ST, AMIGA.
Keyboard trainer which helps spelling.

THE BEST IN EDUCATION

HOW TO ORDER
1. Post your order.
2. Fax your order.
3. Ring credit card number.
4. Ring for advice.
5. Ask your dealer to order.

Prices:
IBM 51/4 or 31/2, ST & STE, AMIGA......£22.95
CPC, PCW, CBM (disks)........................£16.95
FREE CATALOGUE

ORDER DIRECT TO:
School Software Ltd., Tait Business Centre, Dominic Street, Limerick, Ireland.
Tel: (U.K.) 010 353-61-415399.
Fax Orders: 010 353-61-419755.
Credit Card Hotline (U.K.): 010 353-61-415399.
Others Tel: 010 353-61-415399.

Access/Mastercard/Eurocard/Barclaycard/Visa No.

Expiry Date.............................. Cheque/PO

My machine..

Titles..

....

Name..

Address..

....

AMIGA Update

As usual, *AC* brings you the best first in the ever-changing world of the Amiga

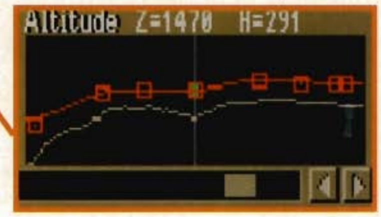


A close look at the blissfully simple path creation process





All the controls are at hand



Altitude editing in a matter of moments

If you're a regular reader of *AC* you're probably waiting for the promised update information on several products reviewed in last month's issue.

The programs with updates pending included MakePath and Terraform, which as you may remember are additional utilities for the excellent VistaPro 2.0.

As well as the Vista additions we'll be taking a look at v1.2 of the Vlab control software which has just arrived in its English form, as opposed to the German variant that was employed for last month's two-page preview.

As if that were not enough, we'll be supplying the very latest news on Hotlinks, a program which in its beta form has already been previewed in *AC* but has now arrived in its final form and promises to revolutionise interactive Amiga applications.

New dimension

We'll start with the duet of Vista additions which add a whole new dimension to Virtual Reality Inc's stunning fractal landscape generator. The most impressive of the two programs has to be MakePath. In short, it's an animator's dream come true.

In the main program itself animation is possible, but only in straight lines directly between the camera and the aim point. MakePath, on the other hand, allows you to create almost any flight path you could wish for.

Once a path is complete, its associated script can be loaded into VistaPro and then rendered frame by frame in the format of your choice, producing a perfect fly-through sequence complete with banks and rolls as the camera hurtles over the terrain-hugging every contour.

The subsequent animations are impressive enough in standard Amiga formats but if the process is applied to 24-bit or DCTV images the finished sequence is nothing short of spectacular.

For anyone wishing to put their creations on tape the DCTV option is ideal, thanks primarily to its 24-bit, VHS-compatible composite output. Aside from the enhanced image quality, DCTV provides perhaps the biggest bonus to animators via its relatively tiny file size, especially when compared to RGB-based 24-bit. On average a DCTV file is only 1/10th of the size of an identical 24-bit RGB.

As a result, it's possible to compile a standard Amiga anim and record it to tape in real-time, as opposed to RGB's still frame recording, which as any pro will tell you can be a frighteningly expensive process.

If you're feeling really adventurous, there's nothing to stop you employing Vista's foreground and background options to incorporate other images within your creations, Imagine being ideal for this as it, too, supports DCTV.

Now we've looked at what can be achieved, the next question is how the software manages such stunning results.



From 2D text to 3D mountains in minutes



The interface in action, with a close-up

If we assume the program is loaded, the next task is to import the landscape within which the animation will take place, before specifying the parameters for the flight itself.

These include basic elements such as speed and frame size but perhaps more interesting is the selection of vehicle in which the camera will make its journey during the anim.

The choice, like the program itself, is impressive. You have the option of either a glider, jet, cruise missile, helicopter, dune buggy or motorcycle. Unbelievable as it may sound, these simulated craft are extremely accurate.

For example, if the glider option is selected the camera sweeps over the land, banking gently and gracefully climbing and descending in relation to the land beneath. At the other end of the scale comes the cruise missile which skims across the surface hugging the ground at an altitude of just 70 feet, constantly weaving and banking to avoid oncoming obstacles.

The dune buggy bounces over every contour with nauseating realism – not recommended for those who suffer from travel sickness...

Once your mode of transport is selected, you simply draw the flight path directly onto the landscape. When complete, a click on the right mouse button defines the finished path either as a straight A to B flight or alternatively as a seamless loop.

If you now click on the Makepath gadget, the program automatically generates the flight which can then be previewed in its entirety as a complete full-screen wireframe animation.

Redefining

If you like the finished sequence but want to make a few alterations, a whole host of options allow you to redefine almost any aspect of the sequence.

You can adjust the amount of roll during banking, increase the degree of pitch during descents and climbs, adjust how accurately the vehicle will track to the undulations on the landscape or even the amount of acceleration or loss of speed during a dive and a subsequent climb.

In short, if you want to change something you can, and when you're happy, simply regenerate the sequence by hitting the Makepath icon once more.

As you can see from the screenshot, the interface provides a bar chart of the flight showing the paths relative height to the ground with individual key frames marked by boxes.

If you want to either add additional keys or adjust the height of existing ones, you can. You may also specify whether the path should pass directly through each key point or alternatively employ a spline path which creates the optimum trajectory between the various points. It's even possible to vary the aim point of the camera during the flight, producing gradual camera pans. All in all, it's almost impossible to

➤

AMIGA Update

find fault in what is a near perfect answer to the thorny problem of script generation.

If you are about to invest in VistaPro 2.0, MakePath is an essential for any would-be animator. Highly recommended...

TerraForm

As the name suggests, TerraForm is aimed strictly at landscape generation. Although VistaPro does support the export and import of palettes and 2D images which can then be transformed into landscapes, it is a little rough and ready and doesn't offer anything like the degree of control that TerraForm can.

To be honest, TerraForm isn't as impressive as MakePath but it nevertheless provides a lot more flexibility to the creation of designer landscapes.

Its main bonus is that you can instantly see the 3D results of your 2D actions via the small arthrographic projection on the right-hand side of the main screen.

In the example, you'll see the letters *AC* inscribed on the landscape. This was simply handwritten onto the landscape which was then translated into a 3D view on the right giving immediate feedback as to the results of 2D artistic exploits.

Aside from simple freehand drawing, the program offers an impressive range of power tools which include bombs for crater creation, rollers for levelling and instant mountains, all added to the scene over definable areas.

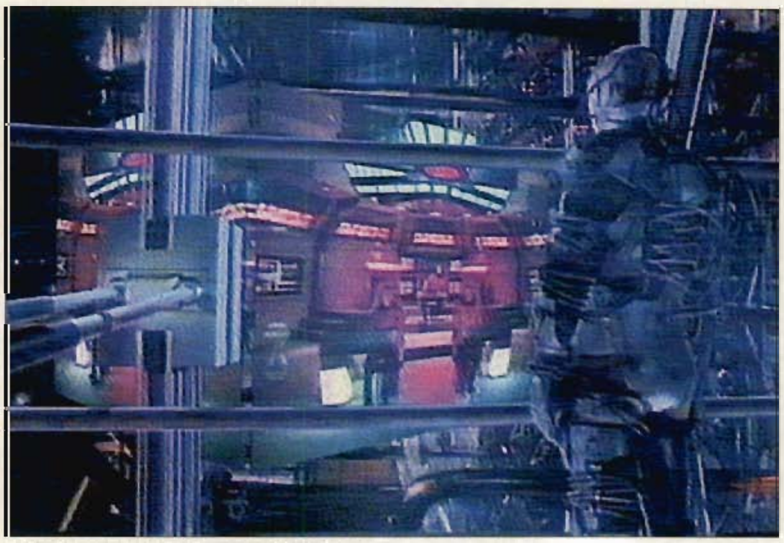
Other tools include inversion from lowland to highland, plus hardening and softening of features.

A full altitude palette allows you to select the colours – or should I say altitudes – of your choice as a painting medium. Once the features of the landscape are complete you can used the definable zoom to examine your creation in full via the 3D window.

Existing DEM landscapes can be imported and edited as necessary and then saved for later importation to Vista. The usual array of scaling and orientation tools are on hand, so almost any viewpoint or altitude is possible. Unfortunately, although useful, TerraForm doesn't match its counterpart MakePath for speed or performance. Screen update can be, and usually is, painfully slow. And the rather limited collection of painting tools do make rather hard work of the creative process.

In short, TerraForm is well worth Impulse Inc's paltry asking price, but it nevertheless pales into insignificance when compared to the exceptional MakePath utility.

If you're interested in VistaPro and its associated utilities, they're all available from Genisoft Ltd., Unit 3, Poyle 14, Newlands Drive, Colnbrook, Slough SL3 ODX.



Another example of the impressive power of Vlab.

Vlab revision

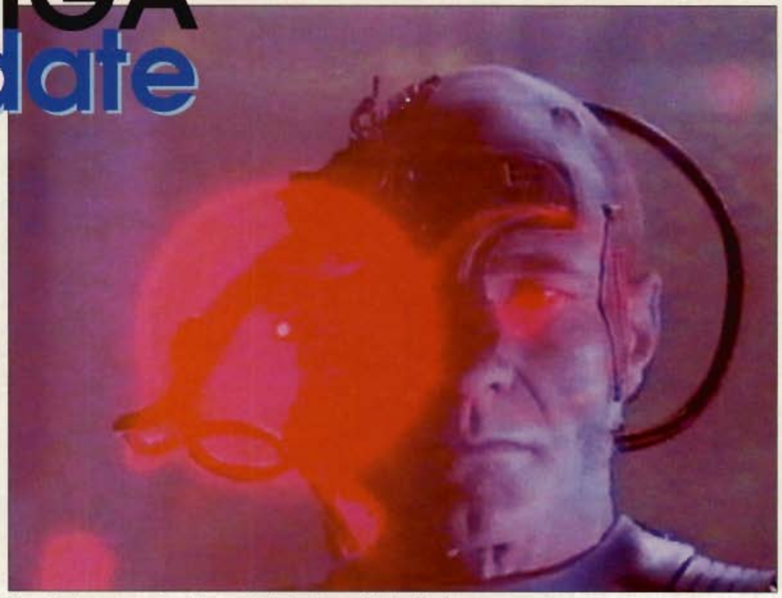
If you caught a glimpse of last month's preview of the amazing Vlab, you can't fail to have been impressed. Well, as they say in the commercials, now it's even better!

As you can see from the grabs, image quality from the new 1.2 version is still stunning, but thanks to the latest update their capture is even easier.

Basic improvements include a new requester that gives total control over colour correction, including chrominance, and luminance for mono images, plus gamma control for both colour and black-and-white.

The display window has now doubled in size and also benefits from much improved image quality which no longer suffers from the rather unpleasant blitter effects present within the original software.

Aside from the software additions and improvements, perhaps the most important revision concerns the program's enhanced speed. The original program did indeed grab instantly, but the processing time which followed – although bearable – did cause a rather annoying delay between possible captures.



Picard's alter ego captured for posterity by Dynamic Data Exchange

Now the time between capture and display is blisteringly quick even in full-colour Ham mode. I must confess I've not yet seen the associated manual but to be honest it's unlikely you'll ever need it (unless you're a devoted ARexx user) as the installation and operation of the hardware/software combination is simplicity itself.



HotLinks in its final form – publishing with a punch

As mentioned last month, Vlab is easily the best real-time grabber on the machine and is well worth the Amiga Centre Scotland's asking price of £299 incl VAT.

Martin Lowe of Amiga Centre Scotland assures me that the manual is on its way and will be dispatched post-haste to any existing users as soon as it arrives at the ASC offices.

ASC are the sole distributor of Vlab, so if you're interested in putting your money to good use phone the Amiga Centre Scotland on 0896 87583, or fax them on 0896 87456.

HotLinks Editions

SoftLogik's Dynamic Data Exchange system, HotLinks, as previewed a couple of months ago, is now shipping at a retail price of £65.

As far as the content of the package goes, little has changed since we last covered it, but interesting developments are now taking place behind the scenes which could help establish Hotlinks as a DDE standard.

Support for DDE within Windows 3.0 has led to its inclusion in a growing number of PC packages, such as Word for Windows, but as yet there is no recognised standard of the kind for the Amiga. Third-party support is vital in this respect, because unless a reasonable number of major manufacturers recognise a new system, it can quickly sink into obscurity.

In the fight for supremacy that would be a standards war if only another manufacturer had the imagination to release a DDE system, HotLinks has an important advantage – it is an open system, independent of any one package, and has been made available to all software houses who care to support it.

This sort of approach is the only way to rapidly gain acceptance for a package, so to gauge its success I asked SoftLogik's Ellen Kazmaier for an update.

She told me that SoftLogik are currently talking to a number of interested developers, including ASDG (makers of the Art Department Professional) and Commodore, and although no third party has committed itself to HotLinks, SoftLogik are cautiously optimistic.

This leads to the intriguing question of whether Commodore are thinking about including some sort of DDE support in the next release of Workbench.

Andrew Ball, Commodore UK's press spokesman, refused to be drawn on the subject, commenting merely that "a manufacturer such as ourselves cannot in the long term afford to ignore [DDE]".

Watch this space for further developments.

WE ARE OPEN ALL HOURS

9am – 10pm Mon-Sat
10am – 6pm Sun

HARDWARE

A500 Plus + S/Ware	£349
A500 512K	£299
A1500 + S/Ware	£565
1084 S Monitor	£237

Phone for 2000 & 3000 Prices

ACCESSORIES

Amiga Int. Drive	£49.00
Cumana Ext. Drive	£53.00
Zydec Ext. Drive	£49.00
512K Upgrade with clock	£27.90
512K Upgrade no clock	£24.90
1-5 Meg Upgrade with clock	£79.00
1 Meg Amiga plus upgrade	£46.99

PRINTERS

Star LC-20	£149.00
Star LC 24-10	£214.00
Star LC200 Colour	£204.00
Star LC24-200 Colour	£294.00

JOYSTICKS

Quickshot II	£6.50
Speedking Autofire	£10.50
Competition Pro 5000 Black	£11.90
Competition Pro Extra Autofire	£12.95
New Mega Star Autofire	£21.50
Maverick Autofire	£12.95
Zipstick Autofire	£12.95

DISKS with Labels

Unbranded Bulk 100% Certified

3.5" DSDD	36p each
3.5" Rainbow	44p each
3.5" DSHD	50p each
5.25" DSDD	28p each

Branded Disks

3.5" DSDD	45p each

Please phone for bulk purchase discounts

STORAGE BOXES

10 Cap	£0.95
NEW 20 Cap Sony	£1.49
50 Cap Lockable	£3.95
100 Cap Lockable	£4.50
80 Cap Banx Stackable/Lockable	£7.99
150 Cap Posso Stackable/Lockable	£15.00
New 200 Cap Stackable/Lockable	£16.50
250 Cap Stackable/Lockable	£18.99

LOOK! LOOK! LOOK!

TRACTOR FEED DISK LABELS
500 Plain White Labels + Software to print your own professional labels only
£9.95

MISCELLANEOUS

Python Microswitched	£8.50
Aviator	£21.50
Intruder	£19.50
Mousehouse	£1.60
Mouse Mat	£2.50
Disk Drive Cleaner	£1.80
Amiga Dust Cover	£3.50
Monitor Dust Cover	£3.50
Mouse/Joystick Auto Shift	£14.95
Amiga Light Pen + S/Ware	£32.00
Mega Mouse	£14.90
Squik Mouse	£14.90
Naksha Mouse + Accessories	£22.00
Zy Fi Amplifier + speakers	£37.95
Thumb + finger Trackerball	£19.99
Crystal Trackball	£32.00
Action Replay Mark III	£57.00
Techno Sound Turbo Sampler	£32.00
2 Piece Printer Stand	£5.70
Midi Master	£26.00
Wordworth 1.1	£77.50

ORDERS BY PHONE OR POST TO:

DIRECT COMPUTER SUPPLIES
0782 642497 9am-5.30pm Week
0630 653193 Anytime
0782 311471 Evening/Weekend

54 Spring Road,
Longton,
Stoke-on-Trent,
Staffs, ST3 2PX

Prices include VAT
VISA Postage please add £3.30 Access
We accept Cheques/PO's/Visa/Access

GROUND ZERO

4 CHANDOS RD, REDLAND, BRISTOL BS6 6PE

Why use us instead of the others?..

Well many of our regular customers have already told us that we are the best overall library they have come across for price, efficiency and the best catalogue disk they have ever seen. Just send two 1st class stamps, or add 50 pence to your order for our latest catalogue – updated daily meaning we can show you all the best of the latest Public Domain/Shareware releases before any other catalogue disk or magazine advertisement can. Catalogue disk updated freely when returned with orders.

ALL DISKS CHECKED FOR AMIGA PLUS COMPATIBILITY

CHEQUES PAYABLE TO: J. FORD

PRICES

PER DISK	75p
POSTAGE PER ORDER	75p
CATALOGUE DISK	50p
FRED FISH CATALOGUE	50p

Be An X-CAD Pro !!!

By Using X-CAD SYMBOL LIBRARIES from COMPUTECH SERVICES.
(Official UK sales for all XCAD products)

- ☐ ARCHITECTURAL ☐ HYDRAULIC ☐ ELECTRICAL
- ☐ ENGINEERING ☐ COMPLETE X-CAD SYSTEMS Based on A1500, A2000 and A3000
- ☐ ALL X-CAD PRODUCTS, PROGRAMS & PERIPHERALS

PRICE MATCH *Before you try anyone else ring us for the best price on XCAD products!!*

We are the official UK sales for all XCAD products, programs and peripherals plus the latest Imagine V2.0 3D Rendering Package. Why not upgrade your current X-Cad system with a digitising tablet Summagraphics MM1201 or Cherry A.3.

Please write or telephone and ask for our latest price list for Amiga Hardware and Software

Computech Services, 87 Victor Gardens, Hawkwell, Hockley, Essex SS5 4DY
Phone: (0702) 206165. Fax: (0702) 206165000

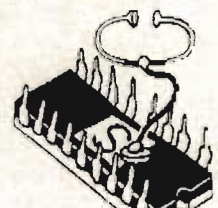
Please enquire about range of Sega Consul and Games

AMIGA NEEDS HELP??

AMIGA FAULTS REPAIRED

Quality work done from
only £23.50
A500, 1000, 1500, 2000 & A590
also monitors, 1084, Philips

For peace of mind, speed & postage charges paid, call for our fixed price offer anywhere in the UK!
Includes free piece of software!



RECOMMENDED UPGRADES FITTED!
(Or supplied)

1Mb-8Mb Mem upgrades
Emulators
Double sided/drives
Hard disk drives
+ more

SPARES ALSO AVAILABLE

STAR ASSOC. COMPUTERS
Ring our Engineers on
081-961 5366/4412

Shop 10, Bridge Park, Harrow Road, Brentfield, London NW10 0RG

G.V.P
Hard Disks

Greater Valley Products (G.V.P) are the largest third party manufacturers of Commodore Amiga add-on peripherals in the world.

GVP A500 SERIES I I

* Fits to the A500 expansion bus
* Colour/Style matched to A500
* 1" high Quantum hard disk drive
* 11 millisecond access time
* Fastest A500 hard drive available
* Approx 1100KB per second data transfer
* Custom VLSI and Faaast Rom Chips
* Autoboot / Game Switch
* 2MB, 4MB or 8MB internal ram expansion facility
* 2 year warranty
* Dedicated PSU supplied
* Built in cooling fan
* Auto parking & auto booting
* External SCSI port means upto 6 SCSI devices can be connected
* 'Mini Slot' expansion port built in to allow for future expansion
* Hard disk management software
* 105Mb version offers storage equivalent to over 170 Amiga floppies!
* Rated 92% by Amiga Format

GVP Series I I 52Mb	£379.00
GVP Series I I 105Mb	£549.00
2Mb Ram Expansion	£69.99
4Mb Ram Expansion	£129.99

GVP A1500 IMPACT I I

* GVP Impact II SCSI hard card
* Internally fits all A1500 & A2000 models
* 1" high Quantum hard disk drive
* 52MB – 11 millisecond access time
* NEW! 120MB – 11 millisecond access time
* Approx 1100KB per second data transfer
* 200MB – 18 millisecond access time
* Custom VLSI and Faaast Rom Chips
* 2MB, 4MB or 8MB ram expansion facility on the card
* Ram and hard drive on 1 card saves on internal expansion slots
* Supports upto 6Mb fast ram for PC bridgeboard users
* 2 year warranty
* Auto parking & auto booting
* Excellent installation software
* Hard disk management software
* Supplied with all cables etc
* Factory tested hard disk drives

GVP Impact I I 52Mb	£289.00
GVP Impact I I 120Mb	£469.00
GVP Impact I I 200Mb	£849.00
2Mb Ram Expansion	£69.99
4Mb Ram Expansion	£129.99

MAKE YOUR AMIGA A500+ 2MB

If you want to expand you Amiga A500 Plus to a total of 2MB then why not fit the new 1Mb Ram Board ? This extra ram will unleash the full graphics capabilities of the A500 Plus and is ideal for may other applications such as sound sampling, data storage etc... It's simple to fit, without any modification, and will not invalidate your computers warranty.

£ 49.99

A500 PLUS ONLY

PRINTERS

ATTENTION ALL CITIZEN PRINTER BUYERS !

We are offering, to all buyers of Citizen printers some very special offers :

1. CITIZEN PRINTER STARTER PACK. *The pack comprises of : 3.5" disk full of printer drivers for the ST, Amiga & PC; 200 sheets of fanfold tractor feed paper; 200 fanfold tractor feed address labels; 5 tractor feed envelopes all for only £12.99.*

2. CITIZEN COLOUR PRINTING KIT. *This kit enables you to upgrade either the Swift 9, Swift 24E or 224 to a full colour printer. The kit comes with a colour ribbon. Normally retailing at around £40.00, we are offering, while stocks last, the chance to buy this colour kit for only £19.99.*

NEW LOWER CITIZEN PRICES !!

Citizen 120D + *(9-pin, 144 cps draft, 30 cps NLQ)*	£124.99
Citizen Swift 9 *(9-pin, 192 cps draft, 48 cps NLQ)*	£184.99
Citizen 224 *(24-pin, 192 cps draft, 64 cps LQ)*	£224.99
Citizen Swift 24E *(24-pin, 216 cps draft, 72 cps LQ)*	£279.99
Citizen Swift 24X *(24-pin, 15" carriage)*	£379.99
Citizen Pro Jet *(inkjet, 360 cps draft, 120 cps NLQ, 300 dpi)*	£409.99

NEW LOWER STAR PRICES !!

Star LC20 Mono *(9-pin, 180 cps draft, 44 cps NLQ)*	£134.99
Star LC200 Colour *(9-pin, 180 cps draft, 45 cps NLQ)*	£194.99
Star LC24-20 Mono *(24-pin, 210 cps draft, 64 cps LQ)*	£204.99
Star LC24-200 Mono *(24-pin, 200 cps draft, 67 cps LQ)*	£249.99
Star LC24-200 Colour *(24-pin, 200 cps draft, 67 cps LQ)*	£274.99
Star SJ-48 *(inkjet, 166 cps, portable, 360 dpi)*	£259.00
Canon BJ10 EX Bubble Jet *(ink jet, Epson compatible)*	£265.00
Hewlett Packard DeskJet 500 *(ink jet, 3 pages per minute)*	£389.00
Hewlett Packard Deskjet 500 Colour *(NEW! full colour inkjet)*	£619.00

SOFTWARE
SPECIAL OFFERS

LEMMINGS £ 5.99	SIMPSONS £ 5.99
CPT PLANET £ 5.99	D PAINT 3 £ 19.99

HAVE YOU GOT A V1.3 AMIGA ?

DO YOU WANT VERSION 2 KICKSTART & WORKBENCH ?

If so, we now have in stock the new VERSION 2 UPGRADE KIT. The kit consists of the Kickstart 2 Rom, Workbench 2 software (including the Extras disk and the Fonts disk) and the Workbench 2 full manuals. Easy to fit and requires no soldering.

£ 89.99

AMIGA STARTER KIT

All those little "extras" that every Amiga owner should have ...

- 10 Blank d/sided disks with labels
- Tailored dust cover to fit the A500
- High quality neoprene Mouse Mat
- and a Joystick for the games ....

£ 16.99

Colour Monitors

ATARI SC 1435

* Low price, high quality
* Fully AMIGA compatible
* Same tube as 1084S & Philips 8833 Mk2
* Colour monitor
* 14" screen
* Stereo speakers
* 600 x 285 pixel resolution
* RGB / Composite inputs
* Free with Amiga lead
* 12 months warranty

only **£ 219.99**

Accessories

512K ram expansion + clock	£29.99
1Mb ram expansion *(A500 Plus)*	£49.99
Compatible external disk drive	£59.00
Pheonix Rom Switcher *incl V1.3 Roms*	£49.99
Kickstart/Workbench V2 upgrade	£49.99
Zy Fi Stereo Speakers	£37.50
Squick replacement mouse	£14.99
Amiga A500 dust cover	£6.99
Mouse Mat	£3.50
Cruiser Joystick	£8.99
Zipstick Joystick	£9.99
Amiga stereo scart lead	£12.99

A500 + Kickstart Rom Switcher
With V1.3 Roms

SOLVE THOSE INCOMPATIBILITY PROBLEMS !

Some older Games and Business software will not run on the new Amiga A500 Plus with Kickstart V2.04 Rom but they do run on the older A500 with Kickstart V1.3 Roms, however, we can now offer you a solution !

We a now stocking the Phoenix Rom Sharer which means, once installed, you can switch between Kickstart 1.3 and 2.04 giving you all the benefits of the new Amiga Plus and the ability to switch over and still use some of your favourite software that will not run on the A500 Plus.

The Pheonix Rom Switcher can be easily installed to the A500 Plus and comes supplied with Kickstart V1.3 Roms. Included in the kit is a microswitch which can be mounted virtually anywhere to enable toggling between the two Rom versions.

£49.99

FOR USE WITH THE A500 PLUS ONLY

TELESALES LINES OPEN 8.00AM TILL 8.00PM - 7 DAYS A WEEK - 0903 700714

TELESALES LINES ARE PERSONALLY MANNED - NOT ANSWERPHONES !



Ezra Surf's Postbag

Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to sitting in a corner reading your letters and selecting the most interesting for publication. Ezra's favourite letters now get rewarded with an exclusive Amiga Computing *designer T-shirt.*

Drop him a line at:

Ezra Surf's Postbag, Amiga Computing, Europa House, Adlington Park, Macclesfield SK10 4NP.

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.

Elusive tutorial

In the May issue's Painless Programming feature, Kyle Rees mentions a tutorial manual by Mel Croucher as one of the best for beginners in the Amiga.

I have tried to obtain this book but to no avail. Could you please give me the relevant information about this book so that I can order it?

Faisal Ali, Chopwell

The manual Kyle was referring to is the Easy Amos Beginners' Manual as supplied with every copy of the package.

Easy Amos is designed as possibly the easiest to learn computer language in existence and can be ordered from Europress Software on 051-357 2961. It costs £34.99 and is the only way to get your hands on Mel Croucher's manual.

Defending beginners

I have just bought an Amiga 500 Plus and am very gradually learning how to use it (work does tend to get in the way).

On browsing through the various Amiga magazines on offer I was attracted to *Amiga Computing* by the promise of articles for the beginner and the free database on the CoverDisk. When I reached the letters page, however, I couldn't believe the letter from Graham Woodcock.

How does this person expect people to learn how to use the Amiga if there are no articles of this kind? I appreciate that he may be beyond this kind of thing, but there are many who are not.

I sympathise with C Kostryke who unwittingly wrote the original letter as everyone has to start somewhere, even Mr Woodcock.

Ms J Wadsley, Lincoln

To be fair to Graham Woodcock, he was complaining mostly about people who have Amigas for years without learning the basics about AmigaDOS, though I agree his comments were a little over the top. The letter was printed because it is indicative of the sentiments shared by some of our more technically-minded readers.

Judging by the response from outraged beginners – your letter was one of many – the letters page fulfilled its function by creating a debate. Thanks to everyone who wrote in on the subject, and let me reassure everyone that we have no intention of abandoning either our beginners or expert readers.

CDTV supporter

Since the price of a CDTV has fallen to an acceptable level I have recently bought one in addition to my existing Amiga system rather than wait for the A570 drive to be released, and after using it for about a month I feel qualified to make a few observations which may help anyone else out there pondering whether or not to buy one.

First, look at the price of a CDTV complete with keyboard, floppy drive and infra red mouse/joystick, then compare it to a standard A500 with A570. The difference in price is quite small and I know which one I'd vote for.

The CDTV system is very sexy, has all the Amiga printer and modem ports, has built-in Midi ports as an extra, and is a very good CD audio player as well.

Even with just an external floppy and no keyboard it can play games which only require mouse or joystick control and the infra red controller, which I find has a good range, doesn't cause a mess with all those cables associated with normal joysticks.

The bundled software is OK, though Lemmings is disappointingly identical to the floppy version, and Hutchinson's Encyclopaedia, though slagged off in various reviews, has loads of useful information even if the user interface is pretty awful.

I hope to get the Fred Fish megadisk, which should keep me occupied for a few months, but why is CDTV software so expensive? A CD costs about 60p to produce so someone is making an unethically large profit. Commodore would do well to include this disk in the bundle.

I hope CDTV succeeds, as this nearly un-piratable medium could encourage software houses to release cheaper software.

Dave Walker, East Grinstead

Most CDTV owners will agree that it is an excellent system for the money, especially as major rival CD-I systems will begin to retail for £500 to £600 when finally released in the UK, but the arrival of the A570 is going to change the market for CD-ROM Amiga products.

On the plus side, from CDTV owners' point of view, large sales of the A570 will result in more of the large software houses producing CDTV-compatible titles. On the minus side, the A570 and Amiga combination could eat into the sales of CDTV systems in a drastic way.

We'll have to wait and see what happens, but Commodore's decision to reposition CDTV as CDTV-Amiga shows that they are less than completely happy with the unit's success as a consumer electronics product.

If most sales of CDTVs are coming from already Amiga-aware people, the A570 could rapidly overtake the system.

One area I'll be watching with interest is that of software prices. As CD-ROM is so much more difficult to rip off, if the software houses continue to sell CDTV software for over-the-top prices once the user base expands, they will have to find a better excuse than the traditional piracy argument. Perhaps they'll take a truly original stand and use "unadulterated greed" instead?

Not yet!

I have an A500 Plus and I was interested to see in your June issue that there is a new Workbench (v2.10). All I really want to know is whether or not I will be able to buy the new version, as it should work with Kickstart 2.04.

Iain Mackay, Ellon

The Workbench v2.10 disks we looked at in the June issue were early developer test versions. Commodore don't have plans to issue an official upgrade to Workbench until at least later this year, possibly early in 1993. Sorry, but you'll just have to wait.

High standards

Having just bought the May issue of *Amiga Computing*, I was pleasantly surprised to find a free database worth £50 on the CoverDisk. However, it seems to be an example of keeping up with the Joneses.

Although most people will welcome the move, I would draw your attention to your competitor, *Amiga Format*, which used to be excellent, but became obsessed with CoverDisks and in the process produced total dross in the rest of the magazine.

Please keep the magazine's standards up! I would especially like to know where all the articles have gone to that *Amiga Computing* was so famous for? By this I mean readable articles, without incorporating sales pitches, an example of which would be the excellent piracy feature in the October 1991 issue.

These provide interesting insights into the Amiga world without exhorting you to buy anything, and greatly expand the readable life of the magazine.

Having said this I don't want to discourage you from producing excellent CoverDisks, but don't fall into the trap of your competitor-turned-games magazine.

Jonathan Parry, Rhuddlan

We enjoy producing exactly the sort of article you mention, but you have to face the fact that in a consumer market there are precious few "issues" on which

to write. Last year alone we addressed the problem of pornography in three separate articles (long before other magazines took a serious interest), and piracy in the major cover feature you mention in your letter.

The issues of over-pricing, poor customer services, and dishonest dealers are attacked every month in the letters pages, and will be hammered home even more in the new Amiga Mart section you'll find in next month's magazine, so don't worry about our avoiding the sort of features you find so readable.

If anything, we would hope to increase our coverage in these areas. What do the rest of you think?

Computer people

In reply to Ian Hodgett's letter in the May issue, I would be only too pleased to send him our copy of The Little Computer People for the price of the postage if you could connect us.

On a more serious note, I would like to mention my observations on the attitude of a lot of the retailers who attend computer fairs. At the last two I have visited, World of Commodore at Earl's Court and the 16 Bit Show at Wembley, I have had the misfortune to purchase both hardware and software which turned out to be faulty.

The first was the Power Hand Scanner, whose software crashed out on my machine. I returned to the show the following day and was given an updated version of the software. This, too, regularly crashed the machine and, as the show had now ended, it took three faxes to Power Computing before I received a response.

I was subsequently offered a further software upgrade and any others which followed free of charge.

In a separate incident at the 16 Bit Show, my 10-year-old son purchased four games at discount prices from a stand only to find that when he tried to run them one wouldn't get past the intro screen and another seemed to be a blank disk in a glossy box.

Once again I returned to the show and, mainly due to my insistence in obtaining receipts for these goods when purchased, I managed against a marked reluctance on the part of the sales staff to have my son's money refunded. It should be the responsibility of the organisers of these events to ensure that all their exhibitors operate in the same way as they do in their normal retail shops.

Robert Lye, London

Thanks for the offer of Little Computer People. If Ian Hodgett sends us a stamped addressed Jiffy bag we'll forward it to you.

On the point of your experiences at the shows, it sounds as if you may have an A500 Plus. At the World of Commodore show, where you had problems with the Power Scanner, the A500 Plus was brand new and many pieces of software were still having problems with it.

The response you had from Power seems to have been as good as you can expect from a large retailer, and although the hassle you personally suffered should have been avoided – service is rarely as quick as it should be – your experience is one of the less aggrieving we've heard of.

The games company who sold you two duff games at the 16 Bit Show should have been more careful, as any problems with the A500 Plus should have been sorted out by then and incompatible software clearly marked.

If your machine isn't a Plus model, you were probably just unlucky enough to receive a faulty disk.

At least you had your money returned – some high street shops will only do this after threats to report them to the Office of Fair Trading!

Apology

In May's ESP column, a letter entitled "Mr Angry vs Beginners" was, by an oversight on our part, printed containing a statement which was found to be offensive by the person concerned, Mr Colin Kostyrka.

Amiga Computing would like to take this opportunity to apologise to Mr Kostyrka for any offence or distress the letter caused, and assure him that the sentiments expressed by the reader's letter are in no way shared or supported by this magazine.

Is copy protection a swindle?

I have owned an Amiga for three years and consider myself an experienced user. I have always read the letters page with interest, especially the ongoing piracy debate.

As a serious user of both games and business software, I am constantly appalled by the way Amiga users are treated by software companies, and probably like many other serious users am considering a move to the PC.

The reason is copy-protected software, which has been the bane of my life, along with software which cannot handle non-standard configurations and poorly written or converted software, all in the name of piracy. I have had enough!

This won't load, that won't load, this won't install on my hard drive, that won't run because I have 2Mb fast RAM and a hard drive.

How much more? How much longer? I have a long list of games which won't load on my machine, for example Speedball 2, F16 Combat Pilot, Jimmy White's Snooker, Kick Off 2, Stunt Car Racer, and all three games from the Cartoon Classics bundle.



I've checked my floppy drive, which is fine, so it seems obvious that all the software which won't load does so because of on-disk copy protection.

The software houses' excuse for their bizarre on-disk protection routines is piracy. Yes the problem exists in a big way, but the software houses desperately need to wake up to the truth that there is no on-disk protection which can't be cracked. If you want cracked software you can get it, and even Ocean's dongle didn't cut the mustard.

Who pays for it all? The honest user. In addition, the average honest user pays not just at the till but every time he or she puts a disk into their beloved Amiga which defies every rule of AmigaDOS. Who at the software houses, with hand on heart, can say that the over-complex routines aren't killing disk drives?

Just listen to the sound of the drive heads crunching away attempting to do something they were never designed to next time you load up a protected game.

And how many hard disk owners have bought a game only to find that it will not install on a hard disk? It is an absolute joke that Amiga users are letting the software houses get away with this.

Considering the expanding user base of the Amiga and the decreasing cost of additional hardware, more and more users are benefiting from hard drives as they are the best way of expanding memory as well.

More and more people are therefore finding out what a hazard copy-protected software is and how the software houses are treating Amiga owners as kids.

The idea of manual copy protection may not cure piracy but I reckon it could be a major step in the reduction of it. I for one won't be buying any more copy-protected software of the on-disk variety.

I don't like it, my drive doesn't like it, and if anyone else doesn't like it I suggest they boot up their favourite wordprocessor and tell the software houses.

John Glover, Camberley

Manual copy protection is as vulnerable to piracy as any other form of protection, because if a cracking crew can get around a hardware dongle you can bet your breeches they can get around simple "type in a word from the manual" routines.

Only recently we saw a copy of Microprose Golf which asked for a word from the manual then went onto the game no matter what you typed in.

The software houses have to keep sales up, and they can't do this if pirates crack and distribute their latest game before it has reached even cost-effective market penetration. However, you quite rightly point out that the situation has become unbearable.

Crackers are keeping one step ahead of even the best on-disk protection, prices are spiralling upwards, games seldom work with hard drives, some are disgracefully badly converted from PC to Amiga, and some are unstable with anything other than a very standard A500. It has to stop somewhere.

Perhaps the answer lies in CDTV and the A570 drive. The CD-ROM medium is piratable only by very professional operations, and crackers would have to invest heavily in duplicating equipment if they wanted to make money from their "hobby".

With 650Mb of data on a single disk, games could be written as to be so dependent on the CD-ROM that even after cracking it and downloading it to floppies, the crackers would find that huge lumps of data on six or eight disks coupled with massive loading times would leave their "product" dead in the water.

Reach the top with . . .

NATIONAL CURRICULUM*

LCL Self-Tuition Courses

EUROPE – OUR FUTURE

LCL announces an incredible new release:

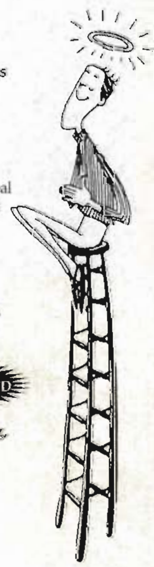
NEW

MICRO GERMAN (Beginners – GCSE & Business)

Complete course of spoken and written German. Suitable for travellers, students, enthusiasts and businessmen (as it includes a program that generates your German business letters automatically). It demystifies German and makes it fun, with graphics adventure games and puzzles. Superb graphics and music. It comes with a book and a manual and only costs £24 for:

- Pronunciation
- Colours
- Gender of nouns
- Present tense
- Wordsearch in German
- Cases – def. articles
- Learning vocab. by pictures
- Indef. articles
- Signs found in Germany
- Plurals
- Opposites
- Time
- Graphics adventure game
- Conversation
- Commands
- Adjectives
- Future tense
- Listening comprehension
- Perfect tense
- Imperfect tense
- Reading comprehension
- Word order
- Role play
- Business letter generator

World leaders • Hons graduate/teacher authors • In educational software charts • Excellent reviews – £5 off total for 2, £10 off for 3



MICRO FRENCH (Beginners – GCSE)

Complete course with real speech & graphics adventure game, 24 programs + a book and a manual. Superb graphics and music. £24.

MICRO ENGLISH (8 years – GCSE)

Complete course. Also for EFL. Teaching spelling, reading, writing and oral with real speech, 24 programs and a book and a manual. Superb graphics and music. £24.

MICRO MATHS (11 YEARS – GCSE)

Best selling GCSE maths course in UK. For ages 11 upwards in 24 program options plus a book and manual. Superb graphics and music. £24.

READING WRITING COURSE NEW UPDATED

NATIONAL CURRICULUM (A.T. 1-5) 24 program course teaching reading, writing & spelling with a book, manual and voice tape. £24.

PRIMARY MATHS COURSE (3 - 12 YEARS)

Complete course with full screen colour graphics. NATIONAL CURRICULUM (Levels 1-4). 24 programs + a book and a manual. £24.

MEGA MATHS (A-level course) Step-by-step course of 24 programs + a book and manual. Full screen graphics for calculus £24.

A500 PLUS OR AMIGA

Phone now for immediate despatch

(*LCL courses are compatible with the N.C. where appropriate)

Update only £5 + proof of purchase. Send coupon and cheques/PO's (+99p P&P) or phone orders or requests for free colour poster/catalogue to:

LCL (DEPT AMC), THAMES HOUSE, 73 BLANDY ROAD, HENLEY-ON-THAMES, OXON RG9 1QB

or ring 0491 579345 (24 hrs)

Name ....

Address ....

Titles ....

Computer ....

PLUS COMPATIBLE **PD DISKS from ONLY 85p** PLUS COMPATIBLE

Our extra value packs have been specially selected to provide quality Public Domain software at competitive prices. All are **A500PLUS COMPATIBLE**

GAMES PACK 3
Revenge of The Mutant Camels (the latest from Jeff Minter) **Soccer Management, Wastelands** (3D adventure), **Wizzy's Quest** (puzzle/platform game) **NU** (shoot 'em up).
5 games on 5 disks £4.25

DEMO PACK
PMC Alfa Omega, Silents Global Trash, Decaying Paradise, Probe Sequence, The Run by Agatron
5 disks £4.25

SLIDESHOW PACK
Popstars, Invisible World, Nasa Slideshow 2 T.Richter Slideshow (2 disks)
5 disks £4.25

A500plus Utilities Pack
6 disks packed with utilities for use with Workbench 2.04
All 6 disks only £5.10

HOME VIDEO PACK
2 disks full of utilities for the video enthusiast.
Only £1.90

FONTS PACK
4 disks containing a large selection of fonts
Only £3.80

CLIPART
A 3 disk set with loads of useful clip art for Dpaint etc **£2.85**

ACCESSORIES
Mouse Mats £3.50
A500 dust covers £3.99
Star LC200 covers £4.50
Mouse Holders £2.95
Pick one or more disks from the above packs at 95p each

ALL OUR PRICES INCLUDE POST & PACKING

We have a large selection of Public Domain & Commercial software – send for our catalogue
(send 75p for disk catalogue or stamp for printed version)

PATHFINDER PD 2nd Floor, 41 Marion Street, Bingley, West Yorkshire BD16 4NQ

Cottage Industries

HOME BASED BUSINESS

EXPLOIT YOUR COMPUTER

The ART of making your computer earn.
For your FREE details send 1st class stamp to:-



COTTAGE INDUSTRIES
4A Oddfellow Court
Oddfellow Street
Ystradgynlais
Swansea SA9 1LH

Virus checked 95p **IS your AMIGA your best 'AMIGO'?** Branded disks 95p

A500 & A500 Plus compatible. WE CAN HELP!

SPEND £10 AND CHOOSE 2 FREE

A SMALL SELECTION FROM OUR VAST AMIGA PUBLIC DOMAIN LIBRARY

SPECIAL COMPILATIONS

INTRO PACK	Cli Help, Cli Wizard (NP), Sid Easy Copier, Icon editor + Icons, Virus Killers, Text Plus wordprocessor, Database, 202 utils (8 disks)	£7.20
HOME BUSINESS PACK	Wordprocessor, Spellchecker, Database, Home Banking, Memopad + more (8 Disks)	£7.20
C PROGRAMMING PACK	C Compilers, C Utils + Debugger, QED Editor, C Manual, Rom Kernel Ref. (9 Disks)	£8.10
EDUCATION PACK	Evolution, Draw Map, German Tutor, Speak & Spell, Chemistry Periodic Table (5 Disks)	£4.50
YOUNG EDUCATION PACK	Simon Says/Space Maths, Colouring Pack, Learn & Play (2 Disks), Trainset (5 Disks)	£4.50
ULTIMATE UTILS PACK	Includes Darkstar 202 utils, Compression utils, SID v2, Diskmaster, Text engine, Custom bootblocks + lots more (6 Disks)	£5.40
GAMES PACK	Star Trek (2 Disks), Moria Adventure, Megaball, Intact, Mental Images Gridrunner, Invaders, Rebound, Return to Earth, Bionix, Girl Action, Missile Command + more (9 Disks)	£8.10
CLIP ART PACK	Vic, Cartoons, Xmas, Animals, Buildings, Food, Work, Entertainment, Transport, Silhouettes, Sport, Signs, People, Holidays + too much to mention (9 Disks)	£8.10
DESK TOP VIDEO PACK	Rolling Credits, Slideshow, Video Backgrounds, Special Effects, Pattern Generator & much more, especially designed for video producers (4 Disks)	£3.60
RED SECTOR DEMO MAKER PACK	Bob, Font & Vector Editors, Program & Utils disk (5 Disks)	£4.50
MUSIC MAKING PACK	MED, Noisetracker, Psound Player & Samples, Licenceware Sounds (8 Disks)	£7.20
ASTRONOMY PACK	Starchart, Amigazer, Deepsky, Planets, Moonphase (4 Disks)	£3.60
SIMULATIONS PACK	Metro city planner, King Oil, Sealance, Truckin, DC10 + more (5 disks)	£4.50
ART & GRAPHICS PACK	Ultra Paint, Cartoon Brushes, Dpaint Art, Fonts & Surfaces, Graphics Utils (5 disks)	£4.50
EXECUTIVES ASSISTANT	Amiga fox DTP, Text Plus, Business Letters (600), Appointment Scheduler, Clip Art, Label print & utils (6 disks)	£5.40
PRINTER ABILITY PACK	Printer Drivers, Printer Generator, Label Printers for Disks & Postage, utils + more (4 disks)	£3.60
PROGRAMMING PACK	Pascal, Dice C Compiler, Basic Compiler, Fortran Compiler (5 disks)	£4.50
COMMUNICATION PACK	Ncomm, Jrcom, Access, Superterm, UK STD Codes, Qed, Dial, Compression Utils, Dial + more (5 disks)	£4.50 (NP)
ELECTRONIC USERS PACK	Electro Cad 1.4, P.C.B. Design Tool, Spice, Msytic Hardware (4 disks)	£3.60
FONTS & SURFACES PACK	Exile Fonts, Large, Small, Unusual, Coloured, Workbench Fonts, Dpaint Fonts, Outline Fonts, Surfaces granite, marble + lots more (5 disks)	£4.50
EMULATION PACK	IBem PC Emulator, C64, Atari ST, Spectrum Emulator, QL Emulator (4 disks)	£3.60 (NP)
GRAPHICS DESIGN & UTILS	Create whirling galaxies & nebulas, Ray Tracing Mpath, Rayshade, Roses, Fracgen, Bezsurf, Mandel mountains, C Light, Brush 4D + lots more (6 disks)	£5.40
ERIC SCHWARTZ ANIMS (1 Mb)	Batman, Terminal, Late Night, Vietnam Conflict, Shuttle Cock, Coyote II Road Test (4 disks)	£3.60

Pack disks available individually at 95p each

UTILITIES

U841 D.T.P. Amigafox (English)
U737 Messydos (Reads PC disks)
U647 Icons (Over 300) De-archived
U2000 Superkillers (Latest Virus Killers)
U646 Exile Fonts
U096 Iconmaster & Ikonmeister + Icons
U843 Biorythms + Utils
U1303 C-Light 3D Ani & Ray Tracer
U2051 Text Plus V 3
U2013 Astrology (2 Disks) (NP) £1.70
U535 Electrocad v1.04
U1207 Landbuild v3.02 (Landscape Creation)
U2020 Agene Family Tree D/Base
U2050 PCQ with PCQED
U1202 Windowsbench (Sid, Iconmaster, Utils) (NP)
U1302 Cartoon Brushes
U2001 Rom Kernal Ref. Manual
U1000 Lattice C
U1001 North C v1.3 (2 Disks) £1.70
U1105 C Manual (4 Disks) £2.00
U1004 C Utils & Debugger
U735 Hard disk Utils
U2037 Pools Checker
U2056 Dice C Compiler (2 disks) £1.90
U2055 Fortran Compiler
U025 CLI Wizard (NP), CLI Help
U878 Custom Bootblocks
U2010 PC Emulator

BUSINESS

B910 Home Management Pack (3 Disks) £2.25
B2016 NEW! Amibase Professional
B800 Dataeasy (Database)
B201 Uedit (Editor/Wordprocessor)
B700 Home Banking
B400 Analyticalc (Spreadsheet)
B523 Visicalc (Spreadsheet)
B407 Clerk (Accounts)
B806 Letters (Over 600)
B500 Business Card Maker (NP)

OTHERS

Science (3 disks) £1.90
Board Games (2 disks) £1.90
Star Trek (2 disks) £1.90
Vivaldi's 4 Seasons (2 disks) £1.90
Madonna Demo (4 disks) £3.60 (NP)
Dating Game 3.5Mb (2 disks) £1.90
Kids Paint (1 disk)

Mouse Mats (Red, Blue, Grey) £2.99
Dust Covers £2.99
Disk Cleaners £2.99

Catalogue Disk including VIRUS CHECKER, UEDIT, DATABASE & UTILS. Only 50p

Disks are Virus Checked
Order £10+ and choose 2 free PD Disks (NP) – NOT A500+ Compatible
Branded Blank Disks 55p each

MAIL ORDER ONLY

SOUND SAMPLES (Licenceware) SCI-FI, DRUMS, GUITARS, ATMOSPHERICS + lots more. £2.50 each or £8.00 for pack of 4.
PC public domain single disks and packs also available
Disks despatched within 48hrs of receipt of order. Printed catalogue list returned with order or send SAE for list only.
P&P UK 85p, Europe £1.50, World £2.50. Cheques and Postal Orders payable to 3 AMIGOS

3 AMIGOS, DEPT AC07, 16 MARSETT WAY, LEEDS LS14 2DN. Tel enquiries welcome after 6.30pm. Tel: (0532) 733043

amiga almanac

Ironing out

ARexx provides the power of an assembler with the ease of use of interpreted languages. Alex Gian shows how debugging needn't be debilitating...

The greatest advantage of an interpreted language is its interactivity. The source program can be easily edited and changes can be tested instantly.

This is very important, particularly when one is learning a language, or making a program prototype. Interpreted programs are run line-by-line, and while this slows them down quite a bit, it gives an enormous gain in flexibility.

Because they are run line-by-line, it is also possible to trace their execution step by step – this makes the finding of "bugs" a lot easier. Assemblers and compiled languages do not share this happy state. Whenever a change is made in a piece of code it must be recompiled, linked with all other relevant bits, loaded up and run again. This is very frustrating when you only want to make a one-line change.

ARexx distinguishes itself yet again by providing first class tracing and debugging facilities. In this issue we will look at two of the most important ones – the Trace and Signal instructions – and see how we use them effectively to help track down and eliminate program errors.

Once again we will use an example program – trivial perhaps in its use, but which contains the basis of many useful techniques on which to build. The program - interact.rexx - is in the ARexx drawer of this month's CoverDisk.

The Signal instruction acts as a "guard" or "overseer" on the system. If any one of certain internal conditions – such as errors, interrupts and so on – arise, then it makes sure the appropriate action is carried out.

The conditions to check for, and the relevant action to take, are set by the programmer – it is also very easy to activate or deactivate these checks as desired. The syntax of the command is as follows:

```
SIGNAL ON/OFF "code"
```

The ON/OFF option simply tells ARexx whether to turn the test for the event specified in the "code" on or off. The "code" itself describes the test, and is also the name of the label that the program jumps to should that event occur.

For instance, if you wanted the program to notify you upon encountering a syntax error, you would need the line:

```
SIGNAL ON SYNTAX
```

Somewhere else in your program you would need to have the appropriate label, which might look like this:

```
syntax:

say "syntax error found on line" SIGL "- be more
careful"
exit
```

The special system variable SIGL stores the line number where Signal was activated. If, further in your program, the line:

```
SIGNAL OFF SYNTAX
```

is found, this feature will be disabled. The following are the "codes" of the events which the Signal command can test for:

SYNTAX– Syntax errors
IOERROR– Error in input/output
HALT– An external halt request (described in the section on inpc)
NOVALUE– This very useful feature will check whether a variable without a value has been called. Remember that normally ARexx would automatically give an unassigned variable the value of its own name, in upper case, ie the line "say x" where x has not been defined would output "X".

What use might this be? Well, ARexx can create variables dynamically, even while the program is running. They may even be given as input strings! It can be important to know the state of a variable.

This is a whole subject on its own, and we will examine it another time, when we look at the Interpret instruction and the Value() function. These dynamic properties of ARexx are a very exciting feature that can allow interesting, powerful and compact ways of solving problems.

In some ways they are similar to features found in Logo, Lisp and other AI languages. But we digress...
BREAK_C/D/E/F – Used to check if a Ctrl-C (D, E or F) has been issued at the keyboard.

Finally, it is also possible for the Signal instruction not to be followed by any of the above "codes", but by an arbitrary expression (the optional keyword Value may also precede the expression).

If that is case, the expression is evaluated, and the result is the label to which the program will jump (of course, this label must exist, otherwise you have an error! Dynamic programming style requires a lot of care). Eg:

```
xyz = 'here'
SIGNAL xyz  /* or SIGNAL VALUE xyz */
.......
here:
/* This is where we end up */
```

In this way, Signal is like an intelligent GOTO statement for transferring program control.

Signals from our program are very useful, but sometimes we need to trace it even more closely for debugging purposes. Trace provides us with a large number of options on how to perform the trace. Here we list them all briefly, and then look at the main ones.

ALL COMMANDS ERRORS INTERMEDIATES LABELS RESULTS SCAN

Note that these options have some unusual features.

the glitches

It is permissible to specify only a part of their names. In other words, Trace Labels, Labels, Trace Lab and Trace L are all equivalent.

The options can be either strings or variables. This is a bit weird. It means that variables are not evaluated. So Trace 'al', Trace A and Trace al are all the same.

The trace may also be set from a function, eg Trace(r). The function Trace() simply returns the current Trace mode.

As with the Signal instruction, it is possible to have an expression as a parameter for the Trace instruction. However, if this expression begins with a string or a symbol it must be preceded by the keyword Value. In the following example,
a = 'lab':

```
TRACE VALUE A
```

would be the same as:

```
TRACE LABEL
```

There are two more special options, "?" and "!".

? is the Interactive mode, described below, and ! is Command Inhibition mode, described in the section on interprocess communication. These two options must precede any others. Every time they are called they toggle themselves on and off. In general, Trace Off will disable all tracing.

Right, now before we get totally lost in the syntax, let's have a look at what this instruction will do.

The All option traces every single line, and will be most useful for beginners. The Intermediates option goes a step further, and expands every expression as well as tracing it. Labels and Results are fairly obvious.

The Normal command traces the points where the program would fail and Errors traces commands that generate problems in the command host. Scan only checks the syntax, but does not run the program.

The Interactive mode – ? – pauses execution after every single line. This allows you to single-step through those tricky bits of your program.

During Interactive mode, anything you type in will actually be interpreted, and added to your program. If you just press the Return key, then the next program line will be executed.

During the trace, ARexx precedes each line that is printed with a short code that "explains" it. These codes may initially look confusing, but they are really easy to understand, and very useful.

They are explained briefly in the program itself. The instructions are also included as comments.

There is no better way to see this than by example. Run – and study – the program interact.rexx, in the ARexx drawer. It will allow you to watch a program running under different traces, which you set. Make sure you read the section on interprocess communication before you do so.

Next time we will look at practical programming with ARexx.

Interprocess communication

Here we will look at three special facilities provided by ARexx, which can only be achieved due to its multitasking nature.

Clips

These do not have much to do with debugging, but they are so useful, that it is about time we mentioned them. Basically, Clips can be seen as a way of defining global variables that remain available to all ARexx programs even after they exit.

Now admittedly Clips are not the only way to do this. We could save data in a file, perhaps in RAM:, and read it as we need it. We could also use the AmigaDOS environmental variables. However Clips are elegant, neat and supported by ARexx.

Clips are set with the SetClip() function, eg:

```
SetClip(pi,3.14)
```

In practice you are more likely to use them to store information that gets updated by various programs, but needs to be available to all. Memory pointers are a good example.

Clips are retrieved with the GetClip() function, eg:

```
my_screen = GetClip(screendata)
```

It is assumed that the Clip "screendata" has been set by some other program. Clips can act as a temporary work database. The current list of clips can be checked with the Show() function.

Command Inhibition

We have already mentioned Command Inhibition. It is activated and deactivated by the Trace ! instruction. Command inhibition is necessary for a multitasking language, in order to disable potentially destructive external commands.

While in this mode, the program will print out the commands that it would normally send, but it will not actually send them to the command host.

The ARexx command utilities

We are referring to the utilities supplied with ARexx itself. Here we will look at those that are relevant to our current subject – TCO,TCC, TS, TE and HI.

HI (halt interrupt) issues a halt command to all programs running under ARexx. This may be useful if some programs are running out of control, but in practice it is not going to be used a lot. We mention it for completeness, since we touched on the Halt Signal above.

A command that is going to be used a lot is TCO. This opens the external Trace Console. The Trace Console is a window to which all the output from the system traces is displayed – it also accepts the input when traces are executed interactively.

If a Trace Console is open, all trace output will be automatically directed to it. If it is not, the output is directed to STDIO -your Shell window.

However, some programs may not have a STDIO stream, especially if they are running as background tasks. If you want to debug programs like this, you will have to open the Trace Console.

Another case where you may want to open the Trace Console is if you do not want the trace output cluttering your CLI window.

In this case, all the output relevant to the trace will appear in the trace console – all your normal output will still appear at the CLI window, where you would also have to enter any variables that are PULLed into ARexx.

Before you run the interact.rexx program, first open the Trace Console by typing TCO at the CLI. When you are finished type TCC – Trace Console Close – to get rid of the console window. Try running the program without the trace console as well, to see the difference in operation.

The command TS forces all tracing into Interactive mode. This can be useful if a program has run out of control – you could type an appropriate command to bring it back into control.

The TE command forces the trace flag off for all the programs currently running under ARexx.

Multimedia movies

Paul Austin looks at incorporating Oxxi's excellent Presentation Master into a video environment

Just as the Amiga itself has spread into an almost infinite number of areas, so has its software. A perfect example of this phenomenon is Scala – a program which at its launch was marketed as an interactive multimedia presentation system with only relatively brief mentions of its now famous titling abilities.

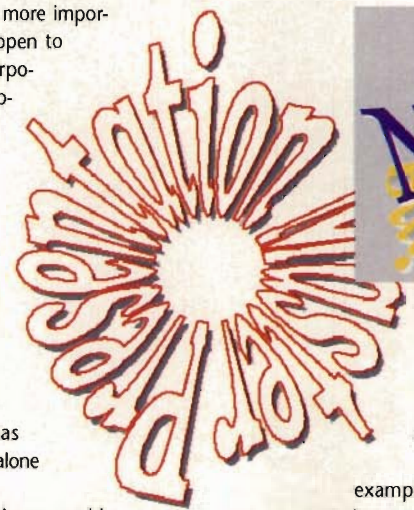
Almost as soon as it hit the streets, Scala was dragged kicking and screaming into countless DTV setups and forced to leave its interactive past behind to become a dedicated titling tool.

A similar fate could soon befall Presentation Master – a program which, as the name suggests, primarily serves a multimedia role, producing everything from on-screen interactive presentations to full PostScript-quality hard copy, complete with designer fonts and graphics, thanks to its stunning internal structured drawing program.

If that's not enough, the aforementioned hard copy can be sent to a print bureau and output onto slides displaying everything from PostScript-quality text to corporate logos.

Full colour graph creation also awaits the user via the program's own spreadsheet-to-graphics processing software – which again can appear on screen, paper or slide.

All well and good if you're into presentation, but how do all these additional features lend themselves to DTV? As I mentioned earlier, the Amiga and its applications are spreading far and wide, and as a result consistent output – no matter what medium it appears in – is becoming more important all the time. If you happen to wander into the field of corporate video, the option of supplying hard copy in the form of slides or PostScript-quality print could make all the difference between you and numerous other hopefuls.





At this point it's worth stressing that Presentation Master isn't as stylish as Scala and couldn't match it or other high-end packages such as Broadcast Titler II as a standalone titling system.

Having said that, as a designer graphics creation and display platform it can still be very impressive, especially when combined with a genlock.

Static

The primary difference between Presentation Master and other possible titling applications is that all available screens are static. This doesn't mean that the screens are totally free from movement, as each screen can be introduced with a variety of wipes and fades.

Unfortunately, full screen introductions are the limit of the program's internal animating features. If you require actual animation within the screen itself you'll need to take advantage of PM's Animation Play option, which allows the user to incorporate normal Anim files into the show at a pre-defined point.

To retain continuity you could save individual IFF images, charts or text from the main program and then employ these as a basis for a subsequent animations which could then be brought back into PM for later use as a standalone anim section within the overall show.

As you can see from the examples, PM's artistic features are pretty impressive. Imagine the time it would take to create such logo types in DPaint, for example. Thanks to PM such artwork is only a few mouse clicks away.

The reason for such speed is the program's use of its own selection of Poly fonts. These are a variant of Compugraphic fonts which allow total control over each letter within the text.

An added bonus is that PM also accepts standard Compugraphic fonts which can be manipulated in exactly the same manner as the program's own Poly font variety.

All the user need do is add an appropriate line of text, assigning colour and point size prior to importation into the paint program. Once on screen, the text can be stretched and shrunk at will.

Letters themselves can then be edited individually to produce the exact style you require. It must be said that individual letter editing can be a tricky process, as small levers and assorted points appear on the letter allowing you to push, pull and generally interfere with the character in question.

Thanks to this process, it's possible to create or perhaps more importantly duplicate any font style you require. Once the text itself is correct, the program can really take you and your text into an area of styling that standard paint programs can only dream about.

Because all the elements are merely collections of points, the new logo can be bent, twisted or generally interfered with without losing any image quality or character.

As a result, extrusions, perspectives, drop shadows, bends and assorted re-sizing effects are all added automatically in totally user definable manner.

To sum up, PM is not the ideal package for the DTV beginner, but if you're looking for a way to offer more than video alone while retaining continuity across the board its the ideal answer to a tricky question.



Sharing the limelight

If the prospect of still frames is too much for your artistic soul to bear, the power users could always take advantage of PM's IFF output and still retain continuity while enjoying the titling, text and animated brush effects that programs such as Scala have to offer.

For example, if you already have a Scala in your collection there's nothing to stop you taking advantage of PM's IFF output option and use the subsequent IFF images as backdrops for various titles or perhaps as animated brushes above other stills.

Fortunately all PM's output is strictly standard IFF with no nasty Hams to ruin the introduction of text or graphics. Although a rather expensive approach to the problem of unified output, the PM and Scala combination gives perhaps the perfect platform for a total multimedia/video-based presentation.

With the assistance of Scala we have a perfect and complementary videographic display – complete with animated text and graphics – plus an option to offer you prospective employer totally compatible hard copy to supplement your whizz-bang, whistles-and-bells video.

If you do take this route, PM will happily save an entire show frame by frame ready for importation into Scala. Obviously this is an expensive and a somewhat less than efficient method of employing PM within your system, but it's still no more expensive than using a dedicated DTP packages such as PageStream or ProPage – plus their associated structured drawing software – as a vehicle for the creation of quality artwork.

Closet maths

It's generally thought that Amiga owners do not attempt serious computing, preferring graphics and sound. Margaret Stanger thinks otherwise...

Computers are very good with smallish, uncomplicated, positive whole numbers or "integers". They handle negative integers like -1, -360, and -32760 equally well.

Fractions and decimals, like one and a quarter, 8.3333, -1.56, and -2/3 are often used in calculations. They are called "real" numbers and consist of an integer part (like "8") and a decimal part (like ".3333").

Sometimes they are called "floating point" numbers because the position of the decimal point is not fixed. Electrical engineers and A-level maths students also have complex numbers available to them.

These numbers consist of a real part and an imaginary part. The C language does not seem to have a corresponding storage class for these numbers – perhaps it is as well.

Short integers can be stored in a "short" or "short int" variable of two bytes, larger integers in a "long" variable of four bytes.

If you display an integer variable of 255 in hexadecimal format, the result is 00FF in a short variable of two bytes, and 000000FF in a long variable of four bytes. What you see is what you get. Boring.

If a real number, consisting of an integer and a decimal part is stored in a four byte "float" variable, the result is much more interesting. The number 1 is stored as 3FF00000, and -1 is stored as BFF00000.

This indicates that the most significant bit is used to store the sign of the number. Examining the floating point storage of integers, it seems that numbers like 1, 2, 4, 2 to the power of anything, get special treatment.

Interestingly, 2^-1 is stored as 3FE00000 and 2^-2 as 3FD00000 . From this it can be seen that the floating point number is made up of three chunks of information – the sign (one bit), a number representing the power of 2 (the exponent) or binary point (11 bits), and the number itself, or mantissa (20 bits). The mantissa is normalised to always be between 1 and 2. The number is exponent x (1 + last 20 bits as a fraction).

Hence 3 = 2 x (1+ (0x80000/0x100000)), 5 = 4 x (1+ (0x40000/0x100000)), 6 = 4 x (1+ (0x80000/0x100000)) and so on.

More interesting, real numbers are stored in the same way. 4 /3 is stored as 3FF55555, 5 /3 is stored as 3FFAAAAA or 1 x (1+(0x55555/0x100000), and 1 x (1+(0xAAAAA/0x100000)).

For a number with a very large integer part, the error in accuracy may be quite large. The program on the support disk demonstrates this loss of accuracy by multiplying by three numbers with varying sizes of integer and decimal parts.

Floating point

A floating point number can be stored as a "double" of eight bytes rather than as a float of four bytes. If each float in the demonstration program is replaced by a double, the answers can be very different.

Another factor that affects accuracy is the way that numbers are rounded. Usually numbers 1,2,3 and 4 are rounded down, and 6,7,8 and 9 are rounded up. The number 5 can get special treatment which varies depending on the architecture of the computer.

The program on the support disk demonstrates this by multiplying numbers by five numbers with varying sizes of integer and decimal parts.

Sometimes "printf" supports the %e, %f and %g options to display floating point numbers, in addition to the usual %c, %s and %d options do to display characters, strings and integers.

My compiler does not have this option, but it does have two routines, fcvt and ecvt, which will provide an Ascii character string corresponding to a floating point number. This enabled me to write a routine to put the Ascii form of a floating point number into a buffer for display.

A fully commented version of this routine – ftoa() – is available in the program source code (float.c) on the support disk. Here is a brief description of how it works.

After the character buffer is cleared, the function "fcvt" is called to put an Ascii character string version of floating point number "f" into a buffer, and return the address of the buffer.

The input parameters are :

- The floating point number
- The required number of decimal places
- The address of an integer to hold a number representing the decimal point position
- The address of an integer to hold the sign of the floating point number

All that is then necessary is to copy the Ascii string into a suitable buffer, including the sign and the decimal point in the right places.

The sign is zero for a positive number, non zero for a negative number. If the decimal point number is positive, it indicates the number of digits in the string before the decimal point.

If the decimal point number is negative, it indicates the number of zeros between the decimal point and the first character in the string. If the decimal point number is zero, the decimal point should be placed before the first character in the string.

The ftoa() routine looks at the value of the decimal point number, *d. If it is zero or positive, the sign is placed in the receiving buffer, then the characters that precede the decimal point, the decimal point, then the rest of the digits.

If *d is negative, the sign is placed, then the zeros before the decimal point, the decimal point, then the digits in the string.

C routines

Previously, all reading and writing files was carried out using the Amiga system routines. The C Library has its own file handling routines which can be used as an alternative.

The C Library routines are identical for every platform, and will call the appropriate system routines. This program opens a file, writes a text string into it, and closes the file – it may not break any speed records, but it will be portable.

The program on the support disk (float) demonstrates floating point storage and errors due to rounding. It features some of the C Library file handling calls, and a routine to display a floating point number as a text string.

The program first demonstrates how floating point storage handles positive and negative integers. It then looks at the storage of fractions and decimals, including inexact decimals with recurring numbers.

Calculations with floating point numbers demonstrates how inaccuracies can occur. All this data would clutter up the screen a bit, so the program opens a file imaginatively called "output", stores all the data as text in this file, closes the file, and exits.

Missing link

Calculations involving integers can be done using the normal add, sub, mulu, muls, divu and divs commands in the 68000 instruction set. Floating point number calculations need the help of routines from the one of the Amiga point maths libraries.

I used the following code to link with the Amiga IEEE floating point maths library:

```
FROM LIB:c.o+"float.o"
TO "float"
LIB LIB:lc.lib LIB:amiga.lib LIB:LCM.lib
```

There are other commands and libraries available for enhanced Amigas.

What a show!

Paul Austin boards the *Amiga Computing* tour bus and heads for the bright lights of the third annual Midi Music Show



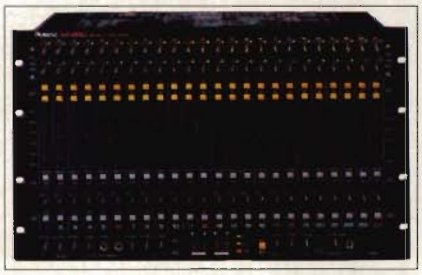
After infuriating the hordes of patiently waiting punters by nipping straight down the press lane with the rest of the assorted journalistic types, I arrived in what's best described as a twiddler's paradise...

At every turn a new collection of fades to slide and buttons to press, interspersed with countless keyboards all doing their best to impress the eager masses milling around the stands.

After half an hour I finally managed to control my kid-in-a-sweet-shop tendencies and get down to some serious sniffing around.

Much to my surprise there were still relatively few Amigas on hand, with the ST for some bizarre reason remaining dominant.

Having said that, the gulf between the faltering Atari and the pack of Amigas, PCs and Macs is definitely narrowing. A primary player in the Amiga's challenge, was Zone Distribution, was surrounded by the usual crowd bobbing up and down with jaws agog as Zone's Andy Bishop put the Amiga through its multitasking paces.



It was quite a moving experience to see the smiles slowly fade from the faces of countless PC, Mac and especially ST fans as Andy pulled down screen after screen of active programs all running in unison under the auspices of MPE (multi-program-environment) within Dr T's KCS sequencer.

As in the Amiga market, the biggest buzzword among the 140 exhibitors was multimedia, with almost every major hardware manufacturer trying to take advantage of this new medium thanks to this latest addition to the Midi repertoire.

During the formative years of the Midi format, the prime concern was simply to enable across-the-board control of keyboards from various manufacturers. However, over the last year Midi has taken the next step in control and now reaches out to embrace more than simple control compatibility.

The advent of GM, or General Midi, is one of the first steps in this new direction. As a consequence, many of the latest module releases on show now embrace this new design format which will virtually ensure that Midi will become one of the kingpins of future developments within multimedia.

The benefit of this new format is that it ensures playback compatibility across the board by assigning compatible sounds or patch positions to all modules employing the system.

As a result, sequences written with any GM module as the original playback medium will be totally compatible with other GM modules from different manufacturers in both synth and drum sounds.

No more piano where a cello should be or triangle for a tambourine. Bliss, absolute bliss...

Of course, the sounds on each module will be particular to that instrument, but all instrument locations will remain permanent. This has obvious appeal to the multimedia market and with each module capable of playing 16 sounds simultaneously, whole orchestras await the touch of a button. The big players have already seen the potential that a little co-operation can provide and to that end both Roland and Yamaha were displaying GM-compatible modules on their respective stands.

Instrument manufacturers aren't the only people taking advantage of GM. Commodore were also busy waving the corporate flag under the banner of CDTV, highlighting its ability to take advantage of the new modules via CD+Midi – a format which we explored in the May issue of *AC*. Perhaps an even more significant step has been the development of Midi machine control. Although Fostex has had its own system on offer for about two years, the ability to control both your instruments and a multitrack from the comfort of your sequencer will soon be available to us all as the various manufacturers take advantage of this latest Midi ability.



Entrenched

Again, the expansive nature of Midi provides a platform from which to emulsify all aspects of the creative process.

As the Amiga has already become the premier multimedia machine the future never looked brighter, with Midi-compatible programs such as ShowMaker already well entrenched in the Amiga market.

Now the prospect of a graphical, musical and video workstation will soon become a reality rather than a distant aspiration, thanks to Midi's new abilities and the spread of MTC onto other mediums.

Help is at hand...

As Midi becomes more widespread and inevitably more complex, the number of Midi-related sleepless nights is bound to rocket. Fortunately for all the alone and confused users out there, there is an organisation called the United Kingdom Midi Association which could be the perfect alternative to lobbing your kit out of the window in the early hours.

They produce a bi-monthly Midi magazine full of the latest releases, along with assorted hints and tips on how to get the best from your setup. To be honest their advice isn't exactly cheap, but for the serious user it could still be money well spent.

Aside from the magazine, the biggest appeal of membership is the access it gives you access to a hot-line offering instant Midi advice to any member in need.

The United Kingdom Midi Association (UKMA) can be contacted on 081-368 2245 or faxed on 081-368 7918.

Next month

As you've no doubt noticed there's a lack of specific product information in this month's column. This is totally intentional as next month's feature will be devoted entirely to Midi and Desktop Music Systems (DTMS). During the article I'll be looking at all the latest Midi-compatible hardware and software releases, hopefully providing the best possible advice for any would be investors.

If you're looking for some help on the tricky business of setting up a Home-based Midi studio, you can't afford to miss next month's issue of *AC*. Keep reading...

Exploring by Email

Pat Winstanley gets involved in an adventure game with the capacity to span the whole world!

Human nature being what it is, cutting your comms bill by using a cheaper phone service, faster modem or offline reader can eventually have the opposite effect.

It's very tempting to look at how much you are saving by your virtuous behaviour and careful management of online time, then blow the whole thing by getting hooked on online games.

Online games are aimed at solitary players who are fed up with only having a computer as an opponent. Games like Scrabble quickly become boring when played against the computer which is why several BBSs run live versions where players from all over the country can log on simultaneously and play each other via their modems.

Unfortunately it's very easy to get carried away and run up enormous phone bills even in the middle of the night. Get interested in the game and time flies. Only when you log off do you realise that you've just spent your monthly allowance in a couple of hours.

Having said that, with care and an eye on time and costs, online games can offer lots of fun and a unique style of play.

Proliferation

Probably the best known online game is MUD – its popularity is reflected in the proliferation of different versions running all over the world.

MUD stands for Multi User Dungeon and is effectively an adventure game which runs constantly. As with normal adventures there are plenty of non-player characters dotted around with whom you can perform a limited form of interaction.

The attraction, though, is the addition of other human players like yourself. Computer-controlled players are fairly predictable – human ones are not!

Over the past couple of weeks I've been looking at a version of MUD being developed by Matt Holmes at CiX under the working title of Blunder. Although at the time of writing it is not yet fully running, the promise is for something very special.

The game itself is based on a system from America which can be modified to suit any particular set of users. It is a simple text adventure with the normal type of commands such as north, west, examine hedge, kill orc and so on.

Scattered around the playing area are various goodies such as weapons, money, treasure and the obligatory ropes and torches. Virtually everything you find can be sold in the shop for gold pieces, and this gold can be used to buy better armour and weapons or if you prefer, experience points.

Gaining experience is mainly a matter of killing anything you can then going off to the guild to have your level raised. The higher your level the stronger, more intelligent, more dextrous and so on you become.

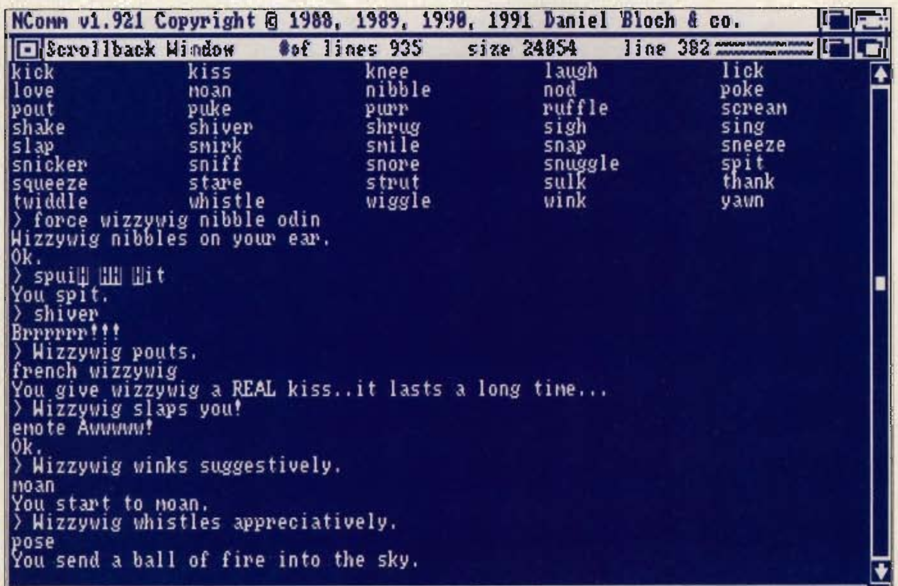
Also with higher levels comes the ability to cast spells. The aim of gaining levels is to eventually reach the dizzy heights of wizard, and this – if you can afford to play long enough to reach it – is where the fun really starts.

Wizards can do literally anything to any other player in the game. There you are, chugging along in the game, waiting for your health to restore after a particularly difficult battle in which you finally managed to defeat the monster who carries hundreds of gold pieces, and a wizard spots you.

Before you know it you are forced to drop all your ill-gotten gains, cry, laugh, grin, smirk or whatever else the wizard's devilish imagination can come up with – you're generally a helpless puppet.

Start exploring...

Blunder should be up and running by the time you read this. Contact CiX on 081-390-8446 for further information. You can contact me by Email as "peewee@cix.compulink.co.uk" or by snail-mail at the AC address.



Lots of 'feelings' commands are available to both players and wizards alike as this extract shows. However, wizards can force ordinary players to perform any of these actions on command. Good job Odin was feeling friendly, otherwise that slap might well have ended up with the rapid demise of poor Wizzywig

Depending on the wizard's mood he might let you go empty-handed, or perhaps create a brand new super turbo-nutter weapon and give it to you. It pays to keep in well with wizards if you don't want to be teleported, weaponless, to the centre of a band of orcs elsewhere in the game.

The other aspect of being a wizard is the ability to create fiendish castles populated with vicious monsters, fabulous treasures and mind-blowing puzzles.

Each wizard has his own castle, several of which are dotted around the main playing area. Although the aim of the game is to become a wizard, use of the abilities gained on achieving that level rather depends on your programming skill.

For instance, in this version you need to be able to code in C to program a castle. However, lack of this skill doesn't stop you acting as a puppet master.

Harmony

From the ordinary player's point of view, other players in the game can be a source of either grief or companionship. Some puzzles are encountered which positively require two players to work in harmony.

For instance, one might be needed to operate the controls of a door while the other player explores. Communication in this situation is by shouting, such as "Wizzywig says, OK Dobbin, I've found the treasure – let me out now", to which the response might be "Dobbin grins an evil grin. Dobbin says no!".

Friendly rivalry between players is the major attraction of the game. A voice call to arrange a login time is all that is needed to make up a party of two or more players who can then storm across the system as an avenging army, killing everything else in sight.

But if you are the slower typist, be prepared for your companion to pinch all the booty before you can even hit Enter. If this happens you will be reduced to hunting out the objects lying around in open view, although even then you may find someone has been there before you.

However, the play area resets at reasonably regular intervals so there's always something for the newcomer to find.

Go with the flow

Smooth, fast scrolling is often important for convincing gameplay. Peter Hickman looks at ways of moving your backgrounds

Many people bought Amos in the belief that it would help them create fantastic software with ease, save the universe as we know it and make the perfect cup of coffee.

Unfortunately life is never that simple and to get any satisfaction from using this language you will have to get to know your Amiga and its capabilities a little better. It also helps to have good Colombian beans.

There are two main methods of producing a scrolling screen. The first is to take a series of interconnecting picture "blocks", place one on the screen, move it a bit and then place the next section.

This is known as a software scroll, because it is up to us – the programmers – to do all of the hard work. Xenon II uses this type of scrolling.

One of the advantages of software scrolling is that it requires very little memory because you really only have to have a standard sized screen open which is 320 x 200 pixels in size.

Custom chips

A hardware scroll is something which is handled mainly by the Amiga's custom chips, which are known as hardware. It is produced by defining a big picture, looking at one section of the picture and then panning across the rest, just like a television camera looking at a wall-mounted mural. Kick Off uses this type of scrolling.

Although fast, hardware scrolling eats up lots of memory. Fortunately the ease with which we can manipulate a hardware scroll more than makes up for the memory consumption. Before we do this I think we should look at how versatile the Amiga screen system really is.

Amiga screens are something special. You need to imagine them not as literal pictures but as a window looking into your machine's memory. By moving our viewpoint around we can examine almost any part of the chip memory contained inside the Amiga. Incidentally, this is how many graphics "grabbers" work.

AMOS allows us to manipulate these "windows on the world" using the Screen Display and Screen Offset commands. Screen Offset controls our view of the computer's memory through our window, while Screen Display controls the size of this window and its position on the monitor.

OK, now we all know how to open a screen inside Amos, don't we? It's pretty simple – load AMOS and make sure you are inside the editor (not Direct Mode). Type this line in:

```
Screen Open 0,320,200,16,Lowres
```

This tells Amos to create screen number 0 with a horizontal resolution of 320 pixels, a vertical resolution of 200 pixels and 16 colours in lo-res mode, which means the pixels are pretty square and chunky. We now have a screen we can experiment with.

The next step is to define two variables XSIZE and YSIZE, these will tell Amoshow big our window will be:

```
XSIZE=320
YSIZE=200
```

OK, now we must start a loop which will allow us to change the characteristics of this window with the mouse buttons. Every time we go around the loop, the mouse co-ordinates are put into the variables X and Y.

These are then used to position the window on your monitor. It sounds confusing, but if you imagine the window as a piece of paper being moved around on a desk – which is your monitor! – it may seem a little clearer:

```
Repeat
X=X Mouse-100
Y=Y Mouse-160
```

Now we must check the state of the mouse keys. If the left button is pressed the variable XSIZE is decremented. If the right button is pressed the variable YSIZE is decremented.

The command ADD allows a little more control over variables than the standard INC or DEC commands. By using ADD we can make the number contained in XSIZE wrap around from 0 to 320 with very little work:

```
If Mouse Key=1
   Add XSIZE,-1,1 To 320
End If
If Mouse Key=2
   Add YSIZE,-1,1 To 200
End If
```

OK, now for the magic command. As you can see the first parameter is the screen number, followed by the X and Y positions plus XSIZE and YSIZE:

```
Screen Display 0,X,Y,XSIZE,YSIZE
```

The final part of our program waits for you to press both mouse keys before it stops:

```
Until Mouse Key=3
End
```

I hope this has not been too complicated to follow so far. The concepts are simple, but I must admit that the whole subject can become overpowering!

I have now introduced you to the basics of using Screen Display, but what about Screen Offset? It is this command which actually creates the scrolling.

If we defined a standard sized screen and used Screen Offset to look above – or below – it, we would see what is contained in those portions of memory.

To start off with, let's open up our screen by typing the following lines into the Amos editor (remember to save your last program if you want to keep it):

```
Screen Open 0,320,600,4,Lowres
Flash Off
Hide On
Curs Off
Palette $0,$90
Cls 1
```

You will notice that I have reduced the amount of colours from the standard 16 down to four. I have also increased the size of the screen to 600 pixels high, which is three times the height of a normal screen.

The next Screen Display command features four commas in succession. This is not a printing mistake! It tells Amos to use its own defaults instead of the missing parameters. The last part of the line tells Amos that we only want to display 200 lines of this 600 line screen:

```
Screen Display 0,,,,200
```

I am not a great lover of football – or football simulation computer games – but they can be useful to demonstrate the principles we are dealing with here. So in the best tradition of Blue Peter, here is a pitch I drew earlier...

```
Draw 0,299 To 320,299
Box 0,0 To 319,599
Circle 160,299,105
```

Even though we cannot see the whole screen, Amos will draw it for us.

Neat, huh? The penultimate step in this program is to let Amos know which part of the 600-line screen we wish to display inside our small 200-line window. Once again, the Screen Offset command contains a couple of commas, this tells Amos to use the default value for the X position of our view.

```
YPOS=0
Screen Offset 0,,YPOS
```

Now for the exciting bit! By pressing the left mouse button the screen will scroll smoothly upwards by telling Amos – through the Screen Offset command – to look at a different part of the picture held in memory through our small screen or "window". If we press the right button the screen will scroll downwards:

```
Repeat
   If Mouse Key=1 and YPOS>0
      Add YPOS,-5
      Screen Offset 0,,YPOS
   End If
   If Mouse Key=2 and YPOS<400
      Add YPOS,5
      Screen Offset 0,,YPOS
   End If
```

We must put a WAIT VBL command here to tell Amos to slow down. Try removing it to see how fast the program runs!

```
Wait Vbl
Until Mousekey=3
```

On the CoverDisk this month you can find an example program using horizontal scrolling. Why not experiment and see what you come up with?

● This is a rather sad AMOS column for me, it's my last one. Yes, after two years I have decided to move on to other things. So it's goodbye from me, and hello to Phil South from next month.

Tweak your pictures

In the second of two parts, Ben Pointer shows how to process and print impressive greyscale scans

Processing and printing images to best effect is vital for professional-looking DTP output.

I want to concentrate on this aspect this month, following on from last month's look at achieving results from even the most humble of hand scanners.

Once the image is scanned in you are left with a massive black-and-white "dithered" picture – a representation of the original made up of lots of black and white dots.

These dots are arranged into things called grains. For 64 greyshade scanners the grains are eight pixels across by eight pixels deep, and each grain represent a shade of grey from 64 white pixels (solid white) to 64 black pixels (solid black).

This dither pattern is not a lot of use to us, firstly because it is so big and secondly because black-and-white printers – even high resolution inkjet and laser printers – can only really produce about 16 discernable shades of grey.

This is why any decent Amiga scanner software has a Convert to Grey option.

Conversion

So the next step is to convert the black-and-white dither to 16 shades of grey. The software does this by reading each eight by eight grain of the dither and deciding which of 16 displayable shades of grey it should be converted to. Because each eight by eight grain gets changed into a single grey pixel, the image is reduced in size to an eighth of the size of the dither.

In truth, such a greyscale image is actually too small. It will typically be about 200 pixels wide, less than a third of the width of a hi-res screen. To get a decent sized picture on the printed page you will have to keep it at about 100 per cent scale, and because its resolution is 75 dots per inch (the resolution of all IFF ILBM pictures), it will be a bit "blocky". To reduce the blockiness you have to scale down to at least 50 per cent, thereby doubling the output resolution to 150 dpi, but then you're left with a tiny picture.

Which is why any Amiga scanning software worth its salt it will employ a technique called double dithering.

Instead of converting each eight by eight grain to a single pixel of grey, it converts each grain to a two by two matrix of grey pixels.

Not only does this provide a bigger greyscale image, but by clever use of shades of grey in these two by two greyscale grains the eye can be fooled into thinking there are more levels of grey in the picture than there actually are.

The end result is that we have a bigger, more detailed greyshade pictur If you are thinking about buying an Amiga hand scanner, make sure the software double-dithers when it converts to grey; it makes a big difference to the quality of the image. A full width scan should reduce after conversion to a screen image about 400 pixels wide – about two-thirds of full screen width.

After converting to grey you might decide that the image is too light. But you have to remember that the grey shades put out by your printer are not the same as the grey shades you see onscreen, which are usually a bit darker. Before twiddling the brightness wheel and scanning again you should dump this first scan and see what the printed output looks like.

Sometimes, even with the brightness wheel at its lightest, you end up with a dark and muddy greyscale picture. In this situation you will need further software with which to process the image. The Art Department (TAD) is what you need – the basic package is good enough, but go for the more expensive professional version if you can afford it.

TAD has a a number of options that allow you to alter the brightness, contrast and gamma values of images. Gamma conversion, put simply, means adjusting the image's shades of grey between black and white, but leaving the actual black and white parts of the image untouched.

On top of this, TAD will let you add a number of dithers to the picture, which can help to reduce the blockiness of the printed image, thus enabling you to print it at scales larger than 50 per cent.



The best greyscale images are produced by software that double-dithers. The smaller image in this screenshot is only single dithered, and is consequently smaller and less detailed





Using The Art Department you can adjust the gamma value of the image, thereby creating a greater contrast between the darkest parts of the image and the next level of grey. While it may look a bit wishy-washy on the screen, the gamma-adjusted image will print better

Printing professionally

For printed output you are ultimately dependent upon the dither patterns produced by your printer. At high resolutions the dots the printer puts on the paper are too often close together to be able to discern 16 levels of grey, especially at the darker end of the scale. Consequently you'll find that greyscale images will always dump better at a lower resolution – something between 120 and 180 dots per inch – because the individual dots are further apart.

If you are using PageStream for your DTP work you can force the dots in the printed output to be further apart by changing the Screen Frequency value in the Edit Co-ordinates requester for the graphic. The number you enter is a lines per inch (lpi) value, and I think you'll find that 60 lpi is best for most dot matrix output.

Professional Page users can only change this lpi value when outputting to a PostScript device. PageSetter II users can't adjust it at all. But all is not lost. There is a program available called TurboPrint Professional that gives your printer better dither patterns and – among many other things – allows you to alter the brightness, contrast and gamma levels of graphical output.

In fact you could say that what The Art Department is to the screen, TurboPrint Professional is to dot matrix printers – it's probably a compulsory purchase for anyone who is serious about hand scanning on the Amiga.

KCS Power PC Board

PC Emulation on your Amiga

About...

The KCS Power PC is a complete 11MHz 1Mb PC sub-system that can be fitted to any Amiga in minutes.

Based around NEC's highly successful V30 CPU, the Power PC Board offers a very high degree of compatibility at machine language level, yet runs faster than an equivalent Intel 8086.

The 1Mb of Autoconfig™ memory can be accessed by all current Amiga models including the A500 Plus. Even the original A500 can access 512K as a standard expansion with clock; plus a 512K RAM disk.

Adored by critics and users alike, the KCS Power PC Board is a real alternative to buying a complete PC clone.

Installation

The KCS Power PC board fits to any Amiga in minutes:

- On A500 and A500 Plus machines it simply slides into the trapdoor expansion; and doesn't invalidate your warranty!
- On bigger Amigas, such as the 1500/2000/2500/3000, it drops into a vacant Amiga slot using the custom designed adaptor board.
- Once fitted, your Amiga can be switched into PC mode simply by clicking an icon. Just reset and it's an Amiga again.

No fuss, no hassle. Just two machines in the space of one.

Video

- Supports the majority of EGA and VGA modes in 16 glorious colours and monochrome – graphics up to 640x480 and text too. Interlace is required for some modes but a software flicker fixer is built in.
- Other video modes include MDA and CGA text and graphics. Also supports Tandy colour graphics adaptor and Hercules monochrome.
- EGA and VGA graphics can be displayed on a domestic TV or monitor. Unlike *real* PCs, no extra hardware is required.

Disk

- Up to four Amiga drives can be connected to your system and accessed in PC modes as 3.5" 720K or 5.25" 360K. Typical disk access is at least twice as fast as most real PC clones!
- DOS can be started from any mounted drive 5.25" or 3.5" and most Amiga hard drives.
- Supports most popular hard disks including GVP Impact, Supra and A590 (Omil and SCSI).
- A massive 200K ramdrive (up to 8Mb with expansion) is available in PC mode and it's PC-reset proof too.

Memory

- Even with a base Amiga 704K is free for DOS programs (640K in EGA and VGA modes).
- EMS (expanded memory) is supported allowing you to run Microsoft Windows without problems and store massive files in Lotus 1-2-3. So, if you have 8Mb on board, the PC can use it.
- XMS (extended memory) is supported – even though this is not usually possible on NEC V30 machines.

Speed

Its Landmark speed puts it way ahead of many true PC systems – it even compares favourably with many AT clones.

However, the crux of the matter lies with the video speed; and this, as many critics have noted is where the KCS Power PC Board scores over all others. It's no use having a wizz-bang processor if the screen takes several seconds to redraw itself.

- Tests in text modes have shown it is several times faster than evenAT clones with dedicated video hardware. Even in graphics modes, it's no slouch although the emulation is limited by Amiga hardware.
- Add a processor accelerator card, andthe 32-bit clean KCS cache software will use it to its full advantage.

Mouse

- Automatic serial mouse emulation is supplied as standard – using your existingAmiga rodent.
- Mouse can be configured as COM1 or COM2.

Joystick

- Up to two sticks can be employed at any time. You decide how they are arranged.

Printer

- Your Amiga's parallel port is accessed as LPT1 in PC mode.

Serial

- DOS usually supports two serial ports, but one is taken by the Amiga mouse. The Amiga's serial can be set as COM1 or COM2 as desired, ie for MODEM etc. up to 19200 baud full-duplex.

Sound

- PC sound is supported, but there's an additional volume control available in software.

Works on...

- All Amigas (except the a1000) fitted with Kickstart 1.2 and Workbench 1.2 or higher.
- Extra memory is not required, but full use will be made of extra hardware, like accelerators, flicker fixers, modems etc.

Help!

- We want you to get the most out of your system so we offer a comprehensive, free telephone helpline service to all registered users.

Updates...

- Since the hardware is a complete PC in its own right, all updates are completely software driven. Registered users can update at any time for a nominal fee to cover media and shipping costs.

"PC emulation is a contentious issue – but the KCS Power PC board is the only one to carry my personal recommendation. It is an excellent product that does all it claims and does it well."– *comments Mark Smiddy, co-author of Mastering AmigaDOS 2.*

PRICE

Including MS-Dos/DOS-Help and on-board memory. **£219.95** incl. VAT/Carr.
Excluding MS-Dos, but including on-board memory. **£189.95** incl. VAT/Carr.
Adaptor for 1500/2000/3000 – **£74.95** incl. VAT/Carr.

Available from your local computer shop (If they haven't got it – Ask them why not!). Or direct from Bitcon Devices

BDL BITCON DEVICES LTD.
88 Bewick Road, Gateshead, Tyne & Wear, NE8 1RS England
Tel: (091) 490 1919, Helpline: (091) 490 0202,
Fax: (091) 490 1918

Compatibility is excellent but no-one can guarantee every single program available, therefore if your purchase depends on a particular program, please ask us first or send in a copy of the program. (With suitable S.A.E. if to be returned). Price subject to change without notice.

Wholly developed and produced in the Netherlands

Some of our importers Worldwide:
Australia: HPD (Tel: 08 349 8466. Kaotic (Tel) 03 879 7098. Spain: Discover Inf. (Tel) 957 47 89 38. Sweden: Delikatess-Data (Tel) 31-300580, Docado (Tel) 40-497480, Canary: Customs Chipx (Tel) 928 271064. Denmark: Betafon (Tel) 31 31 02 73. Portugal: Softclub (Tel) 01 3528452. Ireland: Computer City/Dublin 745250. New Zealand: Pazac (Tel) 054-82949. All trade enquiries welcome. UK and Overseas (PAL only).

35mm Slides in 24 hours from £3.50!

Photographic Prints.
A4/A3 Colour Printing. £3-A4/£4-A3.
OHP's/A3 Flip Charts.
Presentation Slides.
Slide, Photograph & Colour Print Titling.
Postscript Printing.
Fax Proofing.
Tight Time scales a Speciality.

BLT
1st in Multimedia!
Macintosh, PC, Amiga, ST & Sun.

Have prints of your Canon Ion Pictures!

or VHS, Video 8, & Betamax still frames.



– Simply send in your disk, with a list of picture numbers you want developed.

– Your disk and choice of output will be returned to you within a week.

RATES:

24/36 pictures – Just Negatives........£10.00/£12.00
24/36 pictures – Mounted Slides........£12.00/£15.00
6 x 4 prints x 24........£18.00
6 x 4 prints x 36........£20.00

Individual 6 x 4 prints start at £2.00

WE ALSO HANDLE OUTPUT TO VIDEO FROM COMPUTER GRAPHICS

0522 529925 Fax/Modem: 0522 568688 **BLT**

All Slides are 4000 lines shot on Kodak Ektachrome and developed in a professional lab set up for that film type.

Please phone for discounts on large orders.
Please add £1.50 to all orders, any size, for P&P

2 Victoria St., West Parade, Lincoln LN1 1HU



N.B.P.D.L. (DEPT AC) 37 BASFORD ROAD, NOTTINGHAM NG6 0JG. Tel: 0602 267113

VAT Reg. No. 567 9159 85
Virus Free Amiga Public Domain and Commercial Software
All PD disks only £1.25 including post, packing and VAT
Catalogue disk listing 1,000's of programmes only 70p
Printed catalogue free – Please send first class S.A.E.

PD GAMES 1.3 AND PLUS

15 Pipeline
22 Larn V12.0
90 Pom Pom Gunner
94 Moria Text Adv
115 Hack
197 Return to Earth
304 Sea Lance
198 Breakout Cons
474 Golden Fleece
552 Crystal Caverns
815 Dragons Cave
881 Pair It
934 Pontoon
936 Simon Says
943 Treasure Search
945 The Race
946 Crossfire
947 Balloonacy
950 Duel/Underworld
951 Arcadia (Kill of 1)
965/966 Pixi Kingdom
980 Deadline
982 Missile Command
1089 Scum Haters
1101 Megaball

PD MUSIC 1.3 AND PLUS

31/32 Kylie Minogue
37 The Twist
51 Miami Vice
75 Noise Polution
85 Genesis Demo
179/180 SGT Pepper
200 Crockets Theme
224 Stay
251 Bad M Jackson
258 Mary's Prayer
261 Bomb The Bass
356 Alf Two
415 Joe Le Taxi
621 Ultrasounds
628 Goonies
630 Pace Music
651 Laurel & Hardy
660 Jerry Lee Lewis
669 Amigasounds III
751 Classics
1098 Never To Late
Protracker V2.00
Plus compatible uses Soundtracker, Noisetracker modules.

PD UTILITIES 1.3 PLUS

162 Digitech Utils
341 Icon Utils
472 Mobed
655 A-Gene
677 Maverick V1.0
687 Comms Disk
720/721 W/B Utils
722 W/B Multi Utils
729 Copiers
746 Memory Utils
747 Time Utils
750 V2.0 Utils
757 Backups
1121 Andies Icons

PD DEMO'S 1.3 PLUS

38 Ian & Mick
63 Avengers M/D
100 Enigma Demo
108 Star Trekin
154 Robocop Demo
219 Millerlite Ad
324 Kefrens M/D
763 Phenomina
765 Simpsons Demo

Full stock of Deja Vu licenceware at £3.50 per disk or £5.50 two disk set. Fred Fish Disks up to 600 : TBAG Disks up to 60 : Over 2,000 Disks stocked. All Cheques/Postal Orders etc. to: NBPDL at the above address. Please add £1 per order for Air Mail, all prices include Post, Packing and VAT

One and counting...

On CDTV's first anniversary, Dave Windera charts its history and looks to the future

CDTV is a year old. It was officially launched on April 30, 1991 at the British Academy of Film and Television Arts, better known to us all as Bafta - yes, the ones that give the British "Oscars" away each year.

A lot has happened in the twelve short months since then. Many critics of CDTV would have you believe that nothing has moved, but this is just not the case, so let's take a quick look, shall we?

Most important, in my view, was the price reduction that came a short while ago, reducing the cost of a CDTV from £599 to £499. This clever move by Commodore means that CDTV becomes a realistic purchase for many types of prospective customer.

Not only does it make the CDTV affordable as a standalone, multimedia entertainment system, it should also appeal to people purchasing an audio CD player, and those who are thinking of buying an Amiga and want that little bit extra.

Software

The other vital factor in the success of this product - especially in the long term - is the quality of the software available. I am glad to say that the available titles have started to improve beyond recognition compared to those which were initially released.

Titles such as Hutchinson Encyclopedia and Women in Motion were truly awful. I am sure that many people would have gained the same negative impression after sitting through Hutchinson as I did, not helped by the fact that it came bundled with the CDTV and so was endorsed by Commodore as far as Joe Public was concerned. Luckily, with the appearance of titles like Japan World, Learn French with Asterix, Town with No Name and of course Fractal Universe, it is apparent that developers are now really getting to grips with just what is possible on the CDTV.

With software of this standard appearing - and it can only continue to improve - the future of the system seems assured.

Also making an appearance during the last year have been a host of peripheral items. As well as a keyboard, remote control mouse and external floppy drive - which effectively turn your CDTV into a fully functional Amiga 500 - we have seen a remote control trackball (with ports for standard joysticks), an internal genlock and a redesigned remote control pad with the annoying mouse/joystick control replaced with a more robust and easier to use design.

Not yet available as I write is the Advanced Video Mode card - better known by its acronym of AVM - which should be at your dealer by the time you are read this page.

This is much awaited and will provide amazing graphics with a palette chosen from 16,000,000 colours. Best of all is that pricing should be around the £50 mark, so making it within the reach of most CDTV owners. Third-party manufacturers have also started to produce CDTV peripherals now, with Roctec making a CDTV external floppy drive that sells for a lot less than the retail price of the official Commodore model.

It should be pointed out, of course, that any external floppy drive for the Amiga will work happily with the CDTV - it is just the colour that is different The same is true of the keyboard, as it is quite possible to use a standard keyboard from an Amiga 1500/2000 - providing you can make up the appropriate connector adaptor to fit. Of course, it does look so much nicer if everything is colour coded in black!

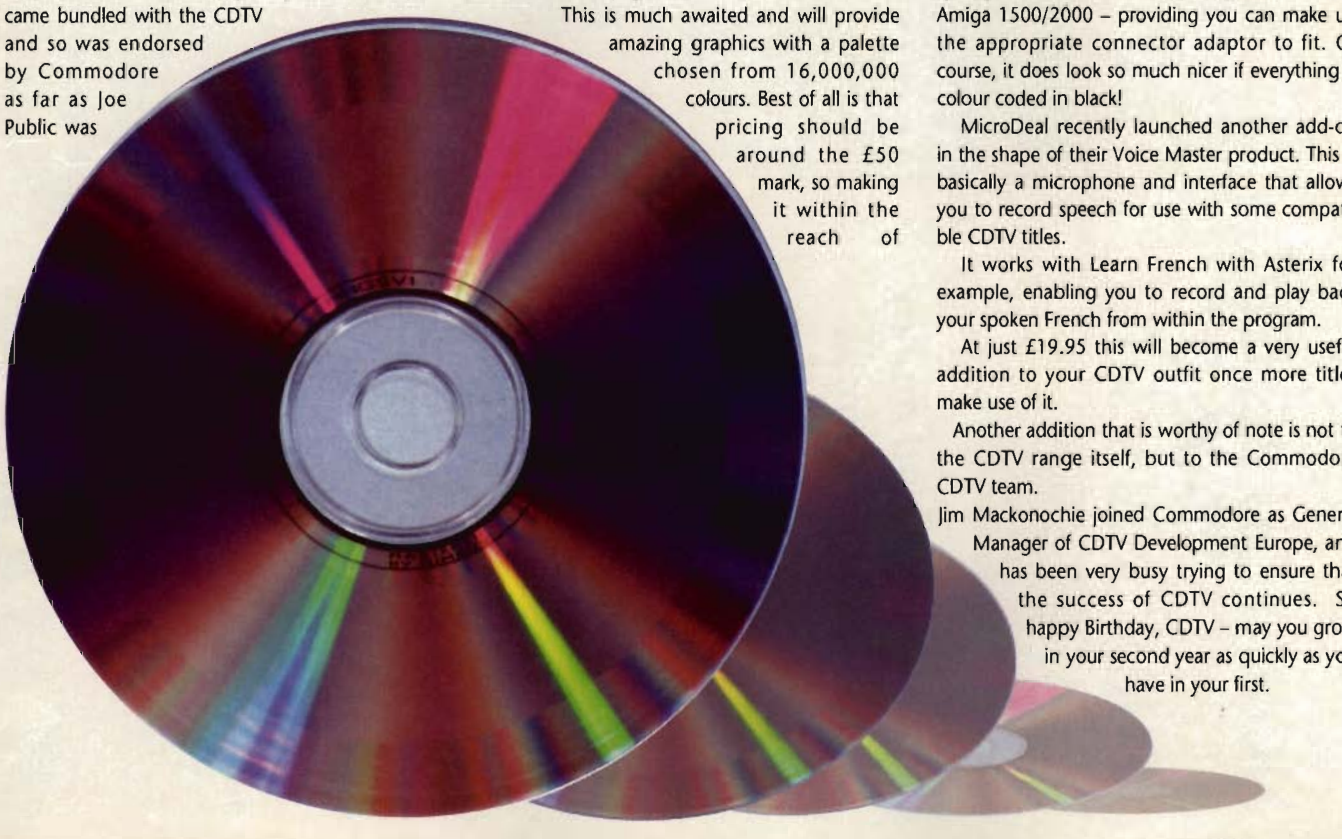
MicroDeal recently launched another add-on in the shape of their Voice Master product. This is basically a microphone and interface that allows you to record speech for use with some compatible CDTV titles.

It works with Learn French with Asterix for example, enabling you to record and play back your spoken French from within the program.

At just £19.95 this will become a very useful addition to your CDTV outfit once more titles make use of it.

Another addition that is worthy of note is not to the CDTV range itself, but to the Commodore CDTV team.

Jim Mackonochie joined Commodore as General Manager of CDTV Development Europe, and has been very busy trying to ensure that the success of CDTV continues. So happy Birthday, CDTV - may you grow in your second year as quickly as you have in your first.



Fine tuning with CDTV

So what could be improved? Well, I would definitely replace the awful Welcome disk if had the opportunity to do so. Although it fits nicely in with the ideal of CDTV, being a manual on CD-ROM, I think this is one area that needs a manual on paper!

After all, it isn't exactly easy to look things up in the disk manual when you are trying to figure out what to do within another program.

There is also the obvious disadvantage that you don't know what to do until you read the manual, but you don't know how to read the manual until you know what to do, if you see what I mean.

Apart from that, I would say that the SCSI card should be made available to one and all, and not just developers as at present, so opening the doors for the use of all sorts of extra devices, such as hard disks.

THE AMIGA COMPUTING TRIPLE BILL!

AN OFFER YOU CAN'T REFUSE

NOW YOU BENEFIT THREE WAYS BY SUBSCRIBING TO AMIGA COMPUTING

- ***Save time and money***
- ***Fantastic free draws***
- ***Superb special offers***

Every month of the year, your favourite *Amiga Computing* provides the best news, reviews, features and games coverage.

Now, as an *Amiga Computing* subscriber, you can enjoy the convenience of having this complete editorial package delivered direct to your door every month – *and save up to 50p off the cover price at the same time!*

Whether you take your computing seriously or prefer to play games, you'll find there has never been a better time to subscribe!

Take a look at these unbelievable offers. Subscribe TODAY and take your pick!... The choice is yours, and remember – these offers are **ONLY** available to our subscribers.



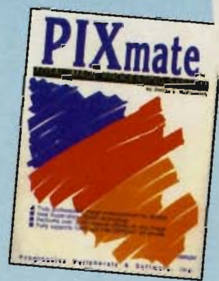
EXTRA! EXTRA! EXTRA!

Every month *Amiga Computing* subscribers receive news of exclusive special offers and promotions along with their copy of the magazine.

Now – as an added bonus – every subscriber automatically qualifies for a monthly free draw with superb prizes up for grabs.

There are no forms to fill in, no special conditions – it's so easy! Just sit back and who knows, you could win a major prize!

THIS MONTH'S PRIZE



One of our lucky subscribers will win a copy of PIXmate, the total image processing system from Progressive Peripherals. This amazing package provides:

- Professional image enhancement
- New Hyper-slice™ Blitter technology
- Choice of 3,000 special effects on any image
- Full support for HAM mode

- Winner of the Panasonic KX-P1170 printer in our May issue draw is Dale Richardson of Woodcote, Bedford. Congratulations, Dale, and your printer should be arriving any time now.

SUBSCRIPTION HOTLINE

If you can't wait to get your hands on one of our great offers you can telephone your order using a credit card

By phone: 051-357 1275
By fax: 051-357 2813

Don't forget to give your name, address and credit card number!

CHOOSE A GREAT FREE GIFT OR SPECIAL OFFER!

A 4 FREE GAMES Worth £30

A rather succulent collection of 16-bit classics that deserves a space in everyone's disk box. Super Cars, Switchblade, Skidz and Axel's Magic Hammer were great before, but as a compilation they're knee-trembling good value.



You pay absolutely nothing

B POPULOUS II Worth £29.99

Control the world with the blockbuster sequel to the legendary Populous from Electronic Arts. Populous II is available in both half and 1Mb versions – please state which you would like.



You pay only £5

C Rom Sharers Worth up to £64

Boost your system and enjoy the benefits of total software compatibility at the flick of a switch



IT MAKES SENSE TO SIGN UP!

- **EVERY** issue delivered direct to your home
- **FREE** CoverDisks packed with quality software
- **GREAT** money-saving reader offers
- **HOTTEST** games in the monthly *Amiga Gamer* supplement
- **FACT-PACKED** pages covering every aspect of the Amiga

SAVE MORE – with Direct Debit*

Now you can save time, hassle and money by taking advantage of our Direct Debit payment system.

Just complete the form below and we will deduct the cost of *Amiga Computing* from your account every quarter without any need for you to worry about your subscription expiring.

What's more, a Direct Debit subscription is by far the cheapest way to enjoy *Amiga Computing* – saving you a full 50p on the cover price!

Direct Debits are safe and hassle free. You can cancel your subscription at any time with no risk.



with a Power Computing ROM sharer. Whether you have an old Amiga or an A500 Plus, your machine can be given a new lease of life by accessing the latest operating system or communicating with the older versions.

Complete with Kickstart 2.04 or 1.3 chip! (Please specify required version)

You pay only £22 or £32

Take Your Pick! Choose any of these great offers

Please return the whole of this form to:

Europress Direct, FREEPOST, Ellesmere Port L65 3EB. (No stamp needed if posted in UK)

HOW LONG? SEE 1

6 months' Subscription		New	Renewal
UK only	£19.95	9523 ☐	9524 ☐
12 months' Subscription		New	Renewal
UK	£34.92	9505 ☐	9506 ☐
Europe/Eire	£39.95	9598 ☐	9599 ☐
Rest of World	£54.95	9550 ☐	9501 ☐
Canada	$85	☐	☐
USA	$80	☐	☐

SEE 6

WHICH OFFER? SEE 2

My choice of Special Offer		
4 Free Games	FREE	9541 ☐
Populous II (½ Meg)	£5	9534 ☐
Populous II (1 Meg)	£5	9532 ☐
Rom Sharer 1.3 version	£22	9542 ☐
Rom Sharer 2.04 version	£32	9543 ☐

WHERE TO SEND IT SEE 3

Name ____________________

Address ____________________

____________________ Postcode ____________________

Tel No ____________________

☐ Please tick if you do not wish to receive promotional material from other companies

HOW TO PAY SEE 4

I enclose a Cheque/Eurocheque payable to Europress Publications Ltd ☐

Please debit my Credit Card ☐ Signed ____________________

Expires ☐/☐ No ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Quarterly Direct Debit (£7.47 – Please complete form below) UK ONLY 9533 ☐

***Complete ONLY if you have ticked the Direct Debit option**

SEE 5 SUBSCRIPTION DIRECT DEBIT INSTRUCTION

AUTHORITY TO YOUR BANK/BUILDING SOCIETY TO PAY DIRECT DEBITS

Please complete the section on the right to instruct your Bank/Building Society to make payments directly from your account. Then return this form to us – no stamp needed.

Europress Direct
PO Box 2
Ellesmere Port
South Wirral, L65 3EA

Originator's Identification No. 8 5 1 4 1 2

Ref No. ....

Bank/Building Society may decline to accept instructions to pay Direct Debit from some types of accounts

Your instructions to the Bank/Building Society:

- I instruct you to pay Direct Debits from my account at the request of Europress Ltd.
- The amounts are variable and may be debited on various dates.
- NO ACKNOWLEDGEMENT REQUIRED.
- I understand that Europress may change the amounts and dates only after giving me prior notice.
- I will inform the Bank/Building Society in writing if I wish to cancel this instruction.
- I understand that if any Direct Debit is paid which breaks the terms of the instruction, the Bank/ Building Society will make a refund.

Name of Bank/Building Society ....

Address ....

....

Name of Account ....

Your Account No. ☐☐☐☐☐☐☐☐

Sort Code ☐☐ ☐☐ ☐☐

Signature(s) ....

Date ....

Your subscription will commence with the first available issue. DA

SIX EASY STEPS TO RESERVE YOUR COPY OF AC EVERY MONTH

1. Tick one box only to indicate how long you want to subscribe for, whether you're a new or existing subscriber, and what part of the world you're in.
2. Choose the special offer or gift you want to receive by ticking ONE box only. Please note that there is only one gift/offer available for each subscriber.
3. Fill in your full name, address and telephone details. Please write as clearly as possible in capital letters to ensure maximum efficiency in despatch.
4. Indicate method of payment with a tick in the appropriate box. If paying by credit card, don't forget to fill in card type, expiry date and number.
5. Only fill in this form if you are paying by direct debit, after ticking the Quarterly Direct Debit option above. Please send original form – no faxes or photocopies please.
6. Canada and USA only send to: Europress (North America), Unit 14, 225 Bysham Park Drive, Woodstock, Ontario NT4 1P1, Canada. Tel: 519 539 0200 Fax: 519 539 9725

To order see form on Page 143'

AMIGA COMPUTING SUPER

POWERBASE

Database Power for all Amiga Users

Features include:

- Simple to use, powerful user interface. Databases of all complexity normally designed in less than 15 minutes.
- Database structure to your own design, with field types such as text, number, date etc.
- Ability to modify database structure even after using the database.
- Powerful data entry, modification and deletion facilities.
- Full sorting and selection capabilities, plus full printing functions including the design of reports and listings.
- Database files are compatible with the PC version of Powerbase allowing interchange between the two systems.
- Works with all Amiga computers including and supports Kickstart 1.2 and 2.0.

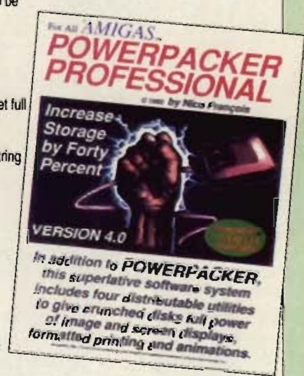
Powerbase has the facilities only found in sophisticated database systems, but is designed to be simple to use by anyone and is at a price that makes most other database packages look very expensive

Code	Price
9502	£19.95

POWERPACKER PROFESSIONAL V4.0

You can't pump up a disk, but with **POWERPACKER** you can compress its contents into less than two-thirds of the space otherwise required for storage - on a floppy disc or hard drive.

POWERPACKER uses sophisticated "crunching" algorithms to reduce the sizes of files, allowing and average of 40% more material to be stored on the medium of your choice.



POWERPACKed programs load, "auto-decrunch" and run.

POWERPACKER includes several freely distributable utilities which access packed files at the click of an icon, so you can get full and quick use of them without decrunching:

PPMORE A fully-pledged screen text reader with options for string search and sending an on-screen image to a graphics printer.

PPANIM Plays a crunched anim file. Tremendous savings possible for storing and playing your animations.

PPTYPE Formats a crunched text file to the printer, including pagination and perforation skips.

Plus **DECRUNCH**, a utility that restores files to original sizes.

POWERPACKER PROFESSIONAL © 1990 By Nico François

Features:

- **Make your files 70% smaller!** Crunch (compact) executable/datafiles and make your files to 70% smaller. With the help of the PPloadseg utility, which you can install on your (hard) disk, you now can even crunch libraries and devices.
- **Extra Powerpacker utilities** PPmore >> Displays packed ascii files PPshow >> Displays packed IFF pictures, PPanim >> Displays packed animations
- **Comes with 2 new libraries.** Powerpacker and a new requester library with even more features and better menus.
- **Crunchfactor even better than version 3.0b**
- **Detects Data or Command files.**
- **Special Kickstart 2.0 version Included**
- **Improved Menus and Colour Table**
- **Full Arexx Support.**

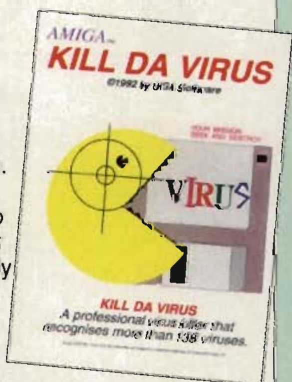
Code	Price
9838	£14.95

KILL DA VIRUS

A professional viruskiller that recognises more than 138 viruses.

Features include:

- Three versions included from a title bar clock version through a custom screen 3D gadget version (KDV5).
- Brainfile which is being updated through PD channels and of course on Newsflash so you will always have an updated version.
- Store your bootblocks on disk so you can restore them when your bootblock is destroyed by a nasty boot virus (Saddam etc etc).



- Checks your memory and will kill any live virus to avoid further spreading on healthy disks. Any unknown bootblock will be analysed with a 'learn' option so next time it can be identified.
- Userfriendly menus so easy to work with.
- Full support of Kickstart 2.0 and hard disks.

Code	Price
9863	£14.95

POWERMENU V2.0

Features:

- Userfriendly utility to produce your own (hard) disk menu's
- Ideal for floppy and hard disk users



- Full support of mouse, joystick and keyboard
- Multitasking
- IFF picture (background pictures) and Amiga font support
- Big Agnus support
- Built in virus protector
- Comes with PD menu compiler so you can spread your menu
- Several system functions (chipmem on/off, time) included

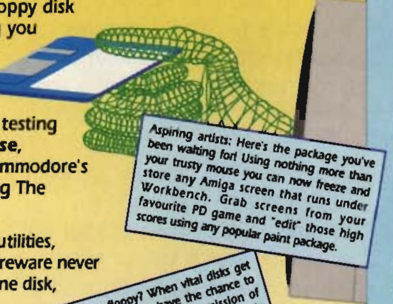
Code	Price
9862	£17.95

BARGAIN OFFERS

WORKSTATION

The WORKSTATION is here!

It's no secret that the Amiga is the most powerful home computer of them all. What has remained a mystery for most newcomers is how to make the most of its immense potential. Now **Amiga Computing** has produced a floppy disk that is packed with everything you need to take the hassle out of harnessing the inbuilt power of your Amiga.



Many months of research and testing have resulted in a **simple-to-use**, single disk replacement for Commodore's Workbench which we're calling The WorkStation.

This indispensable collection of utilities, including some outstanding shareware never before assembled together on one disk, is now available for just £3.50.

It's too good to miss!

Aspiring artists: Here's the package you've been waiting for! Using nothing more than your trusty mouse you can now freeze and store any Amiga screen that runs under Workbench. Grab screens from your favourite PD game and "edit" those high scores using any popular paint package.

Got a faulty floppy? When vital disks get damaged, you'll now have the chance to try the seemingly impossible mission of recovering all your work. Workbench's geriatric DiskDoctor can be sent into retirement by this super utility!

Putting print to paper? The WorkStation disk includes a superb text editor. This powerful package has an unashamedly no-frills approach to producing and formatting professional looking text that would be envied by many of the more expensive commercial products.

The ability to design custom icons as standard is virtually unique to computers in the Amiga's class. The WorkStation turns your Amiga into a comprehensive design studio, providing a wide range of graphic tools that can make icon creation child's play.

The WorkStation has a fully configured dynamic recoverable ram drive which acts like an extra invisible drive to your Amiga. It's a vast improvement on the standard Amiga drive because it is very flexible and goes easy on memory.

Heart of The WorkStation is a powerful shareware package called SID. When you use it you can say goodbye to faceless blank screens and complex commands. Instead your mouse takes full control. Fiddle with files, display text and graphics, sample sounds, uncrunch archives... all this and more with just a click of a mouse button.

Code	Price
9958	£3.50

GRAPHIC STATION

PAINT! DESIGN! CONVERT! COMMUNICATE!



It's all so easy with

Only £4.50

THE GRAPHICSTATION

100% A500 PLUS COMPATIBLE



- Artistic aspirations? Picturesque is colourful, so very easy to use and ideal for all kinds of artwork
- Transfer files to other formats. With your own GraphicStation you can instantly use graphics and text on other types of machines
- Create unique designer fonts. Make your own typefaces with FontMaster, and then add a shadow with ShadowMaker
- Trouble with sorting files and directories? The Directory Manager makes simple work of otherwise quite complex operations



- Want to stylise your user *interface*? With Huge you can create your own icons and click on your own works of art to make things happen on screen
- Creative printing. PrintStudio helps you print text, screen grabs and images created in ANY paint program, with instant fine-tuning all the way

Code	Price
9876	£4.50

PRO MIDI INTERFACE

PLAY IT AGAIN WITH PRO MIDI INTERFACE!



This attractive wedge shaped Midi Interface incorporates MIDI-IN, MIDI-THRU and TWO MIDI-OUT ports. The flat ribbon coble plugs straight into the Amigas serial port and uses high quality computer standard ribbon cable that eliminates the possibilities of data loss between the computer and interface.

PRO MIDI INTERFACE can be positioned alongside the computer rather than behind it so that swapping cables from one Midi device to another becomes a simple task.

PRO MIDI INTERFACE comes with a disk full of public domain programs allowing immediate use, plus a user's guide that explains Midi and how to connect up different devices to the computer. (Midi cables not included).

PRO MIDI INTERFACE is a full professional standard interface, fully compatible with all Midi keyboards, drum machines etc.

Code	Price
9513	£22.95

VIDI-AMIGA

THE COMPLETE COLOUR SOLUTION

Thanks to a breakthrough by Rombo Productions in frame-grabbing technology, you can now produce good colour images quickly and cheaply with Vidi-Amiga and the VidiChrome colour software.

FULL PAL SCREENS

- ***Take snapshots in 16 shades live from video***
- ***Multiple frame store***
- ***Dynamic cut and paste***
- ***Full palette control***
- ***Hardware and software control of brightness and contrast***
- ***Compatible with all video standards***

It includes full colour capabilities with additional Vidi-Chrome and also comes with an RGB Splitter which enables the 3 primary colours to be digitised separately without the need for a conventional filter set. And for a limited period we are including, free of charge, the photon paint package Deluxe Paint II



Code	Price
9936	£99.95

AMIGA COMPUTING BARGAIN OFFERS

ACTION REPLAY MK III

THE WORLDS MOST POWERFUL FREEZER-UTILITY CARTRIDGE

Features:

- Save the entire program in memory to disk
- Super powerful trainer mode
- Improved Sprite Editor
- Virus detection
- Burst nibbler
- Save picture and music to disk
- PAL ot NTSC modes selectable
- Slow motion mode
- Many more instant CLI commands
- Restart the program
- Full status reporting
- Powerful picture editor
- Improved debugger commands
- Music sound tracker
- Autofire manager
- Joystick handler
- Diskcoder
- Set map
- Preferences
- Disk monitor
- Improved printer support
- Dos commands
- File requester
- Boot selector

For Amiga A500/A500+/1500/2000

Code	Price
9512	£57.95

TROJAN LIGHT PEN

Attention All Designers!



The Trojan Amiga compatible lightpen can be used as a complete replacement for the mouse in many applications. Particularly useful in drawing and design, the two button pen provides the user with a very direct method of control.

This package also includes KWIKDRAW - a lightpen compatible drawing program, plus a lightpen driver that allows the pen to be used with most programs that run from Amiga Workbench. The lightpen is also compatible with: *DPaint III* and *IV, Photon Paint, Workbench 1.2/1.3, Battlechess, Professional Page, Music-X and Audiomaster V2.*

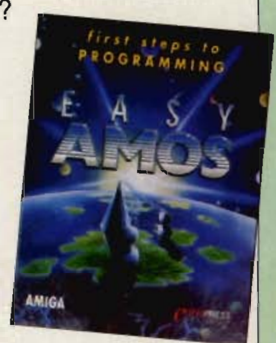
Easy to use, the Trojan lightpen will have you producing designs and drawings that are far superior to those produced using a mouse.

Code	Price
9870	£34.95

EASY AMOS

Bring Your Amiga to Life!

Have you ever dreamed of making your Amiga really work for you? Or wanted to harness to the full its awesome hidden power?
Well now you can!



Even if you're a complete beginner, Easy AMOS will propel you into a fascinating new world where you will quickly learn how to:

- Produce impressive graphical effects
- Create and animate colourful objects
- Scroll large text across the screen
- Make your Amiga actually talk to you
- Add exciting music to your creations

Soon you'll be turning your craziest ideas into reality: Computer art, cartoon animations, home finance, educational software, demos, arcade games, adventures – the list is endless!

Code	Price
9504	£29.95

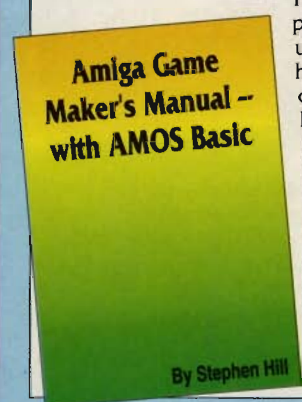
AMIGA GAME MAKER'S MANUAL

Amiga Game Maker's Manual – with AMOS Basic

by Stephen Hill

Stephen is the author of Sigma's best-selling *The Game Maker's Manual* for the Atari ST - and he's the author of the new AMOS (Amiga Operating System) Manual, so nobody is better placed to write this book.

The creator of AMOS, Francois Lionette, has produced the most powerful games programming system. With it, Amiga games equivalent to such best sellers as Xenon 2 and Blood Money can be produced – it's so straightforward that many people will buy an Amiga simply to run AMOS Basic.



The contents include: Game planning - graphic design, mock-ups and sprites; Shoot-'em-ups - high speed AMOS sprites, fire control, collision detection, background animation; Simulations - from simple 3D movement to flight simulators; Role playing - characters, scenarios and magic; Adventure games - plans, rooms and commands; Animation, scrolling, sound and 3D; Links to assembler. Numerous tested, working programs illustrate the book.

Code	Price
9886	£16.95

READER OFFERS

Amiga Computing Magazine Binder & Dust Cover

Using a system of strengthened steel rods, this handsome binder, embossed with the *Amiga Computing* logo, will hold 12 issues of your favourite magazine securely in place. Made from rugged PVC, bound with strong cotton and sporting the *Amiga Computing* logo, the Dust Cover is perfect for protecting your computer.

Magazine Binder	£5.95	*9509*
Dust Cover	£4.95	*9507*

Amiga Computing Mouse & Mouse Mats

Elegant high quality mouse from Gasteiner. Designed to use with any mouse driven application. Also, our mouse mat with the *Amiga Computing* logo is the perfect desktop environment for your mouse, with its specially designed perfect grip surfaces.

Mouse Mat	£4.95	*9508*
Mouse	£19.95	*9988*

Spell!

This unique package makes practising spelling loads of fun. Suitable for children from 5-15, SPELL! allows the user to learn at his or her own pace. It includes five different tests, each making use of more than 5,000 words – so much variety that you'll never get bored.

£8.95 *3614*

Re-Ink Spray

Save up to 90% on ribbon costs and help the environment with this simple cost effective answer to exhausted printer ribbons! Open up your ribbon cartridge, spray with Re-Ink and you have a ribbon which is as good as new, and give a cleaner blacker print with no blotches. Works for all fabric ribbons.

£12.95 *9998*

Amiga Computing Back Issues

April 1992 + 3.5in disc	£3.10	*9746*
May 1992 + 3.5in disc	£3.10	*9747*
June 1992 + 3.5in disc	£3.10	*9748*

Back issues from other months are available – phone for details
Add £2 Europe/Eire, £3.50 Overseas for postage per issue

Amiga Computing Back Issue Bundle

January 1992-June 1992 + 3.5in disc	£18.00	*9893*

Add £6 Europe/Eire, £12 Overseas towards postage

SPARE DISCS

5 Assorted *Amiga Computing* cover discs	£7.50	*9887*
25 Assorted *Amiga Computing* cover discs	£20.00	*9888*

Huge Professional

A complete program for producing icons, sprites, brushes and bobs. With Icon editor, simple user interface, advanced drawing capabilities, font support and bitmap editor why use several utilities if one program can do it all. Supported formats: Image (C & ASM), and Icons (Workbench). Also features advanced zoom concept, featuring custom magnification trailer zoom and co-ordinates display.

£17.95 *9855*

Amiga Made Easy

Make the most of your Amiga and use it to its full potential. This book explains exactly how to use the Amiga effectively – even for newcomers with no previous experience. Existing owners will also benefit as a comprehensive guide to more advanced applications is included.

£12.95 *9871*

Amigados: A Dabhand Guide

A comprehensive guide to the Amiga's Disc Operating System, this book takes a new approach to understanding and using the Amiga and contains a wealth of practical hands-on advice, hints and tips.

£14.95 *9866*

Amos The Creator

AMOS is the definitive programming language for everyone wanting to make the most of their Amiga. It is an extremely easy to learn and use package featuring literally hundreds of special commands to directly control the Amiga's legendary graphics and sound capability.

AMOS The Creator	£34.99	*9834*	AMOS 3D	£24.95	*9836*
AMOS The Compiler	£19.99	*9835*	Bundle of all 3 products	£74.99	*9837*

Stereo Master

Stereo Master is the latest full feature STEREO sound sampler for the Amiga. It contains DUAL analogue to digital convertors, ensuring the ultimate in 8-bit sample quality. The system can record in high quality stereo from its twin phono input sockets, sampling anything from a portable CD player to live radio.

£34.95 *9814*

Auto Mouse/Joystick Switch

Now you can instantly select either your mouse or joystick by simply a touch. You won't need to fumble under or behind your computer to swap your mouse and joystick cables ever again. It's easy to install and ideal for 2 player games.

£17.95 *9882*

ORDER FORM

Offers subject to availability,
Overseas orders despatched by Airmail.
All prices include postage, packing and VAT
Valid to July 31, 1992

PRODUCT DESCRIPTION	PRODUCT REF.	PRICE
Please add postage as detailed below		

POSTAGE: Add £4 for Eire/Europe, £6 for Overseas unless specified above. TOTAL £

☐ **Please tick if you do not wish to receive promotional material from other companies.**

Send to: Europress Direct, FREEPOST, Ellesmere Port, L65 3EB (No stamp needed if posted in UK)

Products are normally despatched within 48 hours of receipt but delivery of certain items could take up to 28 days

Order at any time of the day or night

Don't forget to give your name, address and credit card number

By phone: **051-357 1275**

By fax: **051-357 2813**

General Enquiries: **051-357 2961**

I wish to pay by:

☐ Cheque/Eurocheque made payable to Europress Direct

☐ Access/Mastercard/Eurocard/Barclaycard/Visa/Connect — Expiry Date /

Name ______________ Signed ______________

Address ______________

______________ Post Code ______________

Daytime telephone number in case of queries ______________

AMC 7

Cracking disk?

Seventeen Bit software, well known for their predilection for demo disks and the crushing weight of their entire nigh-on 2,000 disk collection (last weighed in at 2.5 tons, give or take a scrolly demo), may soon be taking the revolutionary step of removing a disk from their collection.

The reason for this is that its inclusion in their library could result in a short stay at Her Majesty's convenience. LSD is an Amiga user group concentrating, among other things, on cracking, which is just another name for software theft. They circulate a disk-based magazine called *Grapevine*.

Issue 9, which was released as 17-Bit disk 1,800-odd, contained a complete set of instructions on how to crack the copy protection of a popular, if ageing, commercial game, by way of a general tutorial for novice crackers.

An LSD "editorial" made a lame and hypocritical attempt at warning potential pupils of the legal implications of cracking, but went ahead with the instructions anyway.

When asked if they were aware of this fact, 17-Bit, whose screening process – assuming that one exists – seems to be about as effective as an MI6 security check, said they would "remove the text file in question" or, if this proved impossible, remove the disk from the collection.

Rest assured we'll be keeping tabs on them.

A300 goes underground

Pundits who read the *Amiga Computing* news pieces on the A300 a few months back and credited us with nothing more than sensationalism will be interested to find out that the machine has in fact been available here for over a month.

When we opened the casing on the A600 sent to us for review, the motherboard was stamped "A300 rev 1.1". Even the power supply casing bore the stamp of the A500's smaller brother, indicating that Commodore changed their minds very late on in the day.

Look out for the following new releases – the Amiga 2300, the CD-ROM A670, and the high end A3500.



Into the valley of death...

... rode the A600? Continuing industry head-scratching about Commodore's intentions for the A600, why they released it at the same price as the A500, why it hasn't got a numeric keypad, and just "why?" in general, recently had a first chance at some sort of clarification when the machine finally went on sale to the unwashed masses (you and me).

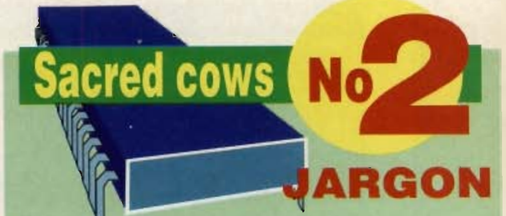
The Amiga show held at Wembley was the machine's unofficial UK debut, though it had been selling mail order for about a month previously, and many a Commodore rep was to be seen hovering anxiously around the stand on which the A600 was being prominently displayed.

Sweaty armpits and ravaged fingernails were much in evidence as the suits awaited punters' verdicts.

Here is a selection of the comments we overheard:

- **"What is it?"**
- **"Where's the hard drive, then?"**
- **(Upon being asked why he'd just bought an A600) "Stands to reason. 600's a hundred more than 500, but it costs the same."**

We understand manicurists and chemists based in the area of Commodore's Maidenhead HQ are expecting a busy time.



Let's face it, there's useful jargon (more usually acronyms for clumsy phrases such as Random Access Memory - RAM), but there's also a lot of totally meaningless tripe, such as CDTV (Commodore Dynamic Total Vision, whatever that's supposed to actually mean), DTMS (Desktop Music System), and the hilarious ZIP (Zig-Zag Inline Packet, a type of RAM chip).

Much of the latest jargon has been dreamt up by marketing suit-fillers and the rest seems to be applied by elitists who're scared that Joe Public will begin to understand what they're talking about and realise it's just a load of old cobblers.

Competition results

The answers to the March Multimedia competition questions are, of course, B-B-C. The winner, who picks up a copy of the excellent Scala presentation package is **Howard Maryon-Davis** of Fulham.

Runners up were M J Skelton of St Leonard's on Sea and John R Kitcher of North Tawton, both of whom will receive a copy of Scala 500. Well done to all three lucky winners.

ADVERTISERS' INDEX

classifieds

Sell your unwanted hardware and software the painless way

As long as your ad is 15 words or less, it's absolutely free!

Should you want more space, you'll find unrivalled value-for-money – for instance, 35 words cost just £6.

Fill in the form on this page and send it to us with your payments (if applicalble) – and remember to include your telephone number!

- Panasonic KX-P1123, 24 pin mono printer for sale, including cable, £150 - 2 months old, mint condition, boxed with manuals, selling to upgrade to colour, George, 0908 370582
- Amiga 500, 1mb Expansion, £250 boxed software, £220 ono, Tel 041 647 4872, Glasgow Area
- Wanted Athletics/Runners Cup Art , 3 Sandringham Road, Parkstone, Poole, BH14 8TH 0202 740684
- Mega disk 1. Two disk magazine packed with reviews, games, news, music and twenty utilities - Send £2.50 to: R Wild, 8 Cranleigh Place, Whitley Bay, NE25 9UD
- I will Swap or buy software for Miracom Miracle Modem. Call John on 0772 431834
- Unused Deluxe Paint 3 £15. Phone 0482 822770, Ask for Paul
- Help wanted with Commodore Mps 1550c, colour printer preferences, Tel 0305 778273
- For Sale, 4 mb Supra Ram 500RX £180 ono, Tel Coventry, 444991 Buyer Must Collect
- Want friends to swap PD disks. Mrs Metcalfe, 18 Northumberland Avenue, Scampton, Lincoln, LN1 2UQ
- PD swappers wanted, Send lists, tel no. to: Ardaven, Westra, Dinas, Powys, Cardiff, CF6 4HA
- Members for new Amiga Group wanted (coders, GFX + musicians) please send example of your work 311803 16337
- B2000 with 2 drives, 10845 monitor, Action replay 2: £600, games available. York 0904 624637
- Xetec Fasttrak SC51 Interface £35. Commodore A2092 disk interface £30. Ideal for A1500. 081 449 0036
- Amiga 500+, Ram expansion, external drive, modulator, £250, CPL Moffat, QM Dept, BMH Hannover, BRPO 33
- Star LC10 colour printer excellent condition with ribbons £99 Tel Peterborough 0733 391 353
- Amiga PD sell or swap. SAE Peter, 65 Meadowside, Lingfield, Surrey, RH7 6BY
- Group needs members, swappers Tel 0925 39676. 29 Cranborne Avenue, Lower Walton, Warrington, Cheshire, WA4 6DE
- Wanted Amiga Tutor, D Paint Videos, also Amiga games for sale. Tel 0274 488198
- Amiga PD to swap. Over 175 titles in my collection. Phone Dave on 0483 572021
- Wanted "Art" of Chess, contact G H Johnson, 091 548 1379
- Amiga Action replay MKIII, Never used. One month old. A500+ compat £40. Phone 0403 562709 Evenings
- A500 Search contacts all over the world Niesen - 202, Rue De Gaulle - 6180 Courcelle, Belgium
- Wanted Amiga tutor and DPaint videos D Platts, 69 White Hall Road, Norwich, 0603 617095
- Sam Coupe, disk drive, Datacorder, joystick, games, boxed as new £150. Phone Shrewsbury 0743 365184
- Wanted TV tuner for Phillips 8833 MKII monitor. Call Richard on (Evenings) 081 451 4885
- Amiga 500. 1 meg upgrade, monitor, lots of games, £950 ono. Amiga monitor, £550 ono
- Got Amiga PD/Shareware? Send to PD, 7 Wakening Avenue, Shoebury, SS3 9BE + best gets free Yamaha keyboard
- Mega Disk mag £1.50 or SAE for info, PB Stanley, 102 Kesteven, Stamford, Lincs, PE9 1SS
- Cheat disk packed with cheats solutions, send blank disc with £5, SAE for 100% reply
- Contacts wanted all over the world. Write to Rob, 64 Hurrell Close, Southway, Plymouth, PL6 6NE
- For sale: Case 4624 modem 2400 baud MNP 5. Mint, only £60. Phone 0734 694824 (Alex)
- X-copy Pro/Cyclone hardware + software copier. Backs-up ANYTHING £30. Tel Steve 0227 462674 after 4 pm
- Bridgeboard at 2256 for Amiga 2000 5" + 3" floppy + dos, manuals £390. Phil Tearne 0865 842149/777799
- Micro-Bottics 8 up Ram expansion, (Populated to 4 Megs) £160 ono. Tel Paul 0707 270988
- Mac 2 disk copier hardware/software by Ashcom. Unwanted gift £22 Post Paid. Tel 0738 828991
- Write to: Gregory Laskawski, Warszawska 159/149. 25-547 Kielce, Poland, to establish PD and Shareware Library
- 2 Meg chips for Amiga A590 hard drive - £45. Ring York, 0904 421968, evenings
- Amiga PD required, please contact, Martyn Thompson, 42 Harbord Crescent, Great Yarmouth, Norfolk, NR30 3EG
- Colour ink jet printer, new 300 * 300 DPI, with Amiga driver. Only £200. Call Howard after 6 pm on 0529 240082
- Wanted, the Games Rings of Medusa, released mid-1990. Tel Dave Strange on 0865 58531
- T.B.A.G 1-60 inc. £32. Fish 521-620 inc. £60 will split. Tel 0543 462908
- PD Swaps, send lists and SAE, David Milicevic, 1 Falstaff Court, Kennington, London, SE11 4RP
- All Amos programmers, Contact: Ape, 7 Majestic Road, Hatch Warren, Basingstoke, Hants, RG22 4XD
- Amiga contacts wanted in Helston/Falmouth area, Call John, 77 Albion Road, Helston, Cornwall, TR13 8JL
- Contacts wanted for assembly language coding. Robert Dabell, 7 Manor Road, Barlestone, Warks, CV13 0HY
- Amiga contacts wanted 100% reply. Chris, 28 Spring Close, Fair Oak, Eastleigh, Hants, SO5 7BB
- Atari 520 STFM for sale, around 170 Prgs. Plus much more sell £370, 0384 73660
- Wanted Amiga contacts. Send info etc, to Matthew West, 86 Gordon Avenue, Portswood, Southampton, SO2 1BZ
- For sale, Digiview III £65. Deluxe Paint III £25. Deluxe Photolab £20. Boxed, Phil Tearne 0865 842149/777799
- Star LC10 colour printer, boxed as new, including Workbench Driver £125, Phone 0933 623463 Evenings
- A500, dual drive, Atonce emulator, 52 mb GVP, much PD pre-configured £750, James 0730 6414
- A1500 Supraram 2 mb fitted, never used. £130, new colour HP paint set £449, 0734 426522
- Stafford area – Programmer seeks persons into coding, graphics or music. Contact Matt 0902 225052
- Sega games for sale, Amiga games for sale, or swap. Call Martin at work 071 353 5272 Ext 270
- A500 Cartoon Classics pack. Originally cost £369, will accept £250, Tel Bristol 0272 590438 Evenings
- C128 computer, disk drive, star NX 1000C and Okimate colour printer and mouse. £200, 0638 711563

classifieds

FOR OFFICE USE ONLY

Name..

Address..

....

Postcode.. Telephone ....

FREE!

£4

£6

Cheques should be made payable to "Amiga Computing"

Please include my advertisement in the next available issue of *Amiga Computing*. I confirm that the advert is not selling illegal copies of software or hardware that do not belong to me. I permit you to publish my address/telephone number only if I have included these details within my advertisement copy. I am over 18 years of age (applicants under 18 must get a parent or gaurdian to sign below).

Signed..

Send to: **AC Classifieds, Europa House, Adlington Park, Macclesfield. SK10 4NP**

Remember to include your phone number/address in the advert as well as on the form!



ALL PRICES INCLUDE VAT & COURIER DELIVERY

STAR PRINTERS

All our Star Printers now come with the following value pack worth £34.96 COMPLETELY FREE

QUALITY COMPUTER CABLE	RRP £9.99
UNIVERSAL PRINTER STAND	RRP £9.99
200 SHEETS CONTINUOUS PAPER	RRP £4.99
TAILOR MADE DUST COVER	RRP £9.99

16 NIGHTS HOLIDAY ACCOMODATION
•PLUS• PD DISK PACK CONTAINING
Wordprocessor•Spreadsheet• Database•
Virus Killer•Backup Utility

STAR LC20 MONO PRINTER

9 Pin Dot matrix 180/45 cps
TOTAL RRP with value pack £268.01
But yours for an unbelievable **£149.95**

STAR LC200 COLOUR PRINTER

9 Pin colour 185/45 cps
TOTAL RRP with value pack £339.29
But yours for an unbelievable **£209.95**

STAR LC24-200 MONO PRINTER

24 Pin mono printer 220/55 cps
TOTAL RRP with value pack £386.29
But yours for an unbelievable **£249.95**

STAR LC24-200 COLOUR PRINTER

24 pin colour printer 220/55 cps
TOTAL RRP with value pack £445.04
But yours for an unbelievable **£299.95**

SERIOUS SOFTWARE

WORD PROCESSORS	
QUICKWRITE basic but efficient and easy to use	£59.99
PENPAL Ideal for both beginners & experienced users	£79.99
WORDWORTH Industry standard, the best!	£129.99
DATABASE	
K-DATA Affordable, reliable & easy to use	£51.99
SUPERBASE PROFESSIONAL The ultimate, you can't get better	£249.95
SPREADSHEET	
K-SPREAD 2 Simple & easy to use	£63.99
K-SPREAD 3 Enhanced version of above	£81.99
MAXIPLAN Well known powerful spreadsheet	£69.99
ADVANTAGE Powerful package for business users	£99.99
UTILITIES	
PERSONAL FINANCE MANAGER Get your finances in order!	£39.99
HOME ACCOUNTS 2 Suitable for home & small businesses	£54.99
DEVPAC 3 Extremely powerful assembler	£69.99
GRAPHICS	
AMOS THE CREATOR Become a budding gamesmaker	£49.99
WALT DISNEY ANIMATION STUDIO every cartoonists dream	£99.99
MUSIC	
MUSIC X I.I Special purchase whilst stocks last	£49.99
BARS & PIPES Top of the range for the professional	£148.99

SUPER ABC PERIPHERAL PACKS

PACK B

1/2 MEG UPGADE BOARD
RRP £29.95
2 FIGHTER JOYSTICKS
RRP £15.98
40 CAPACITY LOCKABLE DISK BOX
RRP £9.99
10 DS/DD 3.5" DISKS
RRP £9.99
TOTAL RRP £65.91
SUPER VALUE PACK PRICE
£34.95

PACK A

QUALITY REPLACEMENT MOUSE
RRP £19.99
SOLID PERSPEX DUST COVER
RRP £12.99
QUALITY SEMI-SOFT MOUSEMAT
RRP £7.99
TOTAL RRP £40.97
SUPER VALUE PACK PRICE
£24.95

PACK C

1 MEG EXPANSION BOARD
RRP £59.95
40 CAPACITY LOCKABLE DISK BOX
RRP £9.99
10 DS/DD 3.5" DISKS
RRP £9.99
3.5" DISK DRIVE CLEANING KIT
RRP £7.99
TOTAL RRP £87.92
SUPER VALUE PACK PRICE
£44.95

PROFESSIONAL AMIGA REPAIRS

"Simply The Best" Commodore authorised repair centre
FREE COLLECTION & DELIVERY BY COURIER Make one simple phone call and leave the rest to us!
GUARANTEED 7 DAY TURN AROUND We guarantee to return your computer WITHIN 7 days of collection
FULL OVERHAUL INCLUDING OVER 50 DIAGNOSTIC CHECKS Your Amiga will look as good as new
3 MONTH COMPREHENSIVE GUARANTEE Our engineers work to the highest standard
ALL INCLUSIVE PRICE We won't con you with hidden extras
FREE 50 GAMES SOFTWARE PACK
For a limited offer we will give you a 50 games pack completely free!

ALL FOR THE INCREDIBLE PRICE OF **£59.95**

NB Personal callers in to one of our stores may deduct £10 from the above price
We reserve the right to refuse computers that have been tampered with or are beyond economical repair. In this instance a nominal £10 charge will be made to cover carriage costs

EXTEND YOUR WARRANTY TO A TOTAL OF 1 YEAR FOR ONLY AN ADDITIONAL £20.00

ORDERING MADE EASY

BY PHONE
Simply call our Head Office quoting your Access/Visa number on
0234 218060 (5 lines)

BY CALLING PERSONALLY
Simply call in to your nearest FutureWorld store where our fully trained personnel will be more than happy to deal with your requirements.

BY POST
Make cheques, Building Society drafts or POstal Orders payable to
FUTUREWORLD COMPUTERS LTD
UNITS 25-27 SERGEANTS WAY
ELMS INDUSTRIAL ESTATE BEDFORD MK41 0EH
Please write cheque guarantee card number on the reverse of cheque to ensure same day clearance. Cheques without a card number subject to 10 days clearance.

REMEMBER ALL PRICES ARE INCLUSIVE OF VAT & COURIER DELIVERY (UK Mainland only)
SATURDAY DELIVERY = £10.00

FINANCE
Finance available to suit your specific needs. Written details on request
Instant credit is available in all FutureWorld stores

PREMIER GOLD CARD
- 7 day money back guarantee on goods purchased if not completely satisfied (subject to goods being returned in mint condition)
- 30 day exchange for new policy should a fault occur
- 1 year guarantee giving free collection and delivery service should a fault occur
- Exclusive Premier Gold Card with Personal Membership Number entitling you to special offers
- All this for only £19.95 per item purchased

1 YEAR GUARANTEE
For the whole guarantee period, warranty service will be completely free of charge

TECHNICAL SUPPORT/ON SITE ENGINEERS
Being authorised service centres for AMSTRAD, COMMODORE & STAR, we are equipped to deal with the majority of queries.

FULLY COMPUTERISED ORDERING SYSTEM
This enables our telesales staff to provide up-to-the-minute stock information coupled with efficient dispatch

FULL TESTING PROCEDURE
All computer hardware is tested prior to dispatch maintaining our motto;

Simply the BEST

All goods subject to availability
All prices correct at time of going to press
E.& O.E.



YOUR NEAREST FutureWorld STORE

BEDFORD
70 High Street Bedford Telephone 0234 217070

NORTHAMPTON
1-7 College Street Northampton Tel 0604 33996

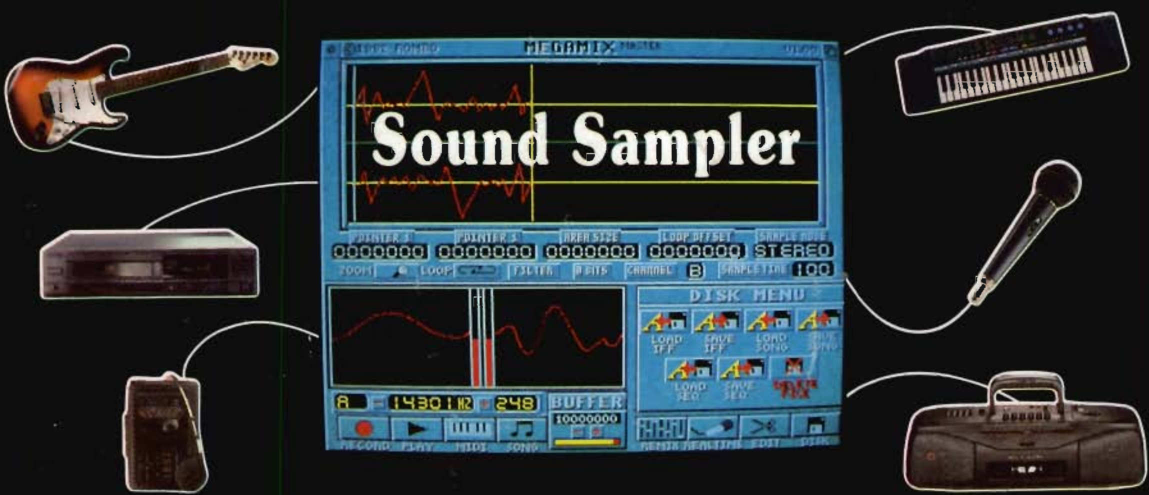
WELWYN GARDEN CITY
16 Church Road Welwyn Gdn City Tel 0707 390029

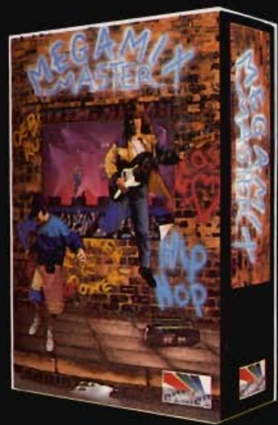
WATCH THIS SPACE
More stores opening soon!



NEW £39.95 INC. VAT

Real Time Digital Effects





MEGAMIX master is a low cost, high specification digital effects cartridge that plugs into your printer port. It will allow you to sample or record stereo sound from almost any musical source. Special effects such as echo can be added in real time, perfect for the up and coming Karaoke singer who wants to get that live sound through his Hi-Fi. You will find that **MEGAMIX** masters performance and ease of use is unmatched by any rival. Just plug it in and go . . . .

CUT-Remove samples between pointers and stores it in the cut buffer.

COPY-Copies sample between pointers into the cut buffer.

INSERT-Inserts the contents of the cut buffer into the soundwave.

SPLICE-Removes the sample between pointers, stores it in the cut buffer then slides the rest of the soundwave together.

CHOP-Removes all of the soundwave except for the sample between pointers.

DELETE-Erases the sample between pointers.

MIX-Mixes the contents of the cut buffer with the soundwave.

FLIP-Reverses the sample between pointers.

PLAY CUT-Replays the contents of the cut buffer.



ECHO-Adds user definable echo between pointers.

IN-Makes Sample between pointers start quietly and build up to full volume.

OUT-Offers the opposite effect to IN.

PHASER-Adds phase shift to your sample.

LOUDER-Adds volume.

QUIETER-Decreases volume.

SEEK 0-Finds zero points nearest pointers, used in looping.

FILTER-Removes hiss or high frequency noise from your sample.

PACK-Removes every 2nd sample between pointers.



Distributor	Country	Tel. No.
Arkofoto S.A.	(Spain)	010 3433010020
Centresoft	(U.K.)	44 0216253388
Computerlink	(Sweden)	010 4631750333
Gem Distribution	(U.K.)	44 0279442842
Goldhill Associates	(Export)	44 819062009
H.B. Marketing	(U.K.)	44 0753686000
Merlin Grafx	(Austria)	010 4352238896
Scibis Sprl	(Belgium)	010 3222458307
Soundware Srl	(Italy)	010 39332232670
V.C.S.	(Holland)	010 31104511537
Micropace (U.K.)	(U.K.)	44 075355188
Precision Dist	(U.K.)	44 0815433500
S.D.L.	(U.K.)	44 0813095000

ECHO-Adds echo to and incoming sound in Real Time.

DIRECT-Plays incoming sound direct through Amiga.

SYNTH-Adds user definable distortion to sound in Real Time.

PHASER-Applies variable phase shift again in Real Time.

STEREO ECHO-Adds digital delay between L & R speakers.

VIBRATO-Rapidly varies frequency of sound.



Other features include . . .

* Fully multi-tasking
* 3D animated icons.
* UNDO function.
* Compatible with workbench 2.0.
* Runs perfectly on the new A500P.
* Mono sampling up to 52KHz.
* Stereo sampling up to 26KHz.
* 4 or 8 bit sampling.
* Thru-port for printer or Vidi digitiser.
* Stereo 3.5mm jack plug and lead.

LOAD IFF—Load a single IFF sound sample

SAVE IFF-Saves your sample between pointers as an IFF file.

LOAD SONG-Load a song sequence

SAVE SONG-Save a song sequence.

LOAD MIDI-Load a midi sequence.

SAVE MIDI-Save a midi sequence.



Rombo Productions
Baird Road, Livingston
SCOTLAND EH54 7AZ
Tel: (44)-0506 466601
Fax: (44)-0506 414634

ROMBO